

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

THIRD SERIES

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8 SEPTEMBER 1934

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CAWSTON

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JOURNAL OF THE ROYAL INSTITUTE *of* BRITISH ARCHITECTS

VOL. 41. 3RD SERIES

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No. 19

Journal

We are able to announce that His Majesty the King will open the New Building in Portland Place, on Thursday, 8 November, at noon.

The Finance and House Committee wish to remind members that the Conduit Street property is now in the market and to ask for their assistance in its disposal. The plans are available at the Institute for inspection by anyone interested.

This JOURNAL contains several insets, all of importance. First is the prospectus of the History which the Council has decided to publish as a suitable commemoration of the Institute's centenary. The prospectus explains all there is to know about the book. Special attention should, however, be paid to the reduced price for all orders given prior to publication. The second leaflet announces the temporary closing of the library during the move. This must cause some inconvenience, but we hope it will be tolerated willingly. The time has been made as short as possible without destroying the chances of conducting the complicated business of removal with efficiency.

Another leaflet is about the dance at Olympia. Those who want tickets are recommended to apply soon as the number to be sold is strictly limited to 250. We also enclose the card to which reference was made in the last number of the JOURNAL, admitting to the Building Trades Exhibition. Every one of these cards presented at the exhibition will bring a contribution of two shillings to the funds of the Architect's Benevolent Society.

We have received the following notice with reference to the Advisory Panels from Mr. J. A. Slater, chairman of the Public Relations Committee: As the whole system of Advisory Panels is now being reorganized and enlarged by the constituent bodies which first established them, the Council has recently decided that

it is advisable to promote a greater uniformity in the working of the individual Panels. A circular has accordingly been sent out to the architect members of the Panels explaining the principles which they are requested to put into practice.

Any member of the R.I.B.A. whose plans have been disapproved by a local authority on aesthetic grounds, whether with or without the advice of a Panel, is requested to communicate *immediately* with the Secretary of the R.I.B.A.

The following letter on the Advisory Panel System was recently sent to the Press:—

SIR,—As your readers are aware, a system whereby the Architectural profession can give assistance to the Local Authorities, as to the passing or rejection of plans submitted to them for approval under the Town and Country Planning Act, 1932, has been in existence for some years.

This system is generally known as the "Advisory Panel System."

A report by a Sub-Committee of the Central Panels Committee upon the extension of the existing organisation has now been approved by all the bodies concerned, namely the C.P.R.E., the Institute of Builders, and the R.I.B.A.

In order that the Architect members of these panels may work on recognised and approved lines and also may be relieved of very difficult decisions where plans are submitted to them by their brother architects, the following Code of Procedure is being sent to the Secretaries of the Panels for their guidance:—

(i) The decision of a Panel to advise a Local Authority to disapprove plans should only be given in cases where the design is illiterate and injurious to the locality, and should not depend upon questions of style or personal preference.

(ii) Where plans submitted by properly qualified persons come up for review by the Panel, before advice be given to the local authority to disapprove such plans, attempts should be made by personal interview with the applicant if possible, to arrive at a satisfactory solution. Where such an attempt fails upon an important scheme, reference should be made to a special committee, consisting of five (5) members of the Art Standing Committee of the R.I.B.A. and four (4) members of the Central Panels Committee.

By the approval of the Report it is hoped that the Panel System may become more and more widely used and thus that there may gradually be an improvement in the general standard of design; and by regularising the functions and general attitude of the panels themselves toward the plans submitted to them, that the Architectural profession itself will work together for a high object—which is common both to itself and the public at large.—Yours,

GILES GILBERT SCOTT,
President, Royal Institute of British Architects.
PERCY HURD,
Chairman, Central Panels Committee.

We are now able to publish fuller particulars about the R.I.B.A. Club, which the Council of the Royal Institute have been able to establish at the Building Trades Exhibition, through the kindness of Mr. H. Greville Montgomery. Some years ago, at one of the earlier Building Trades Exhibitions, a clubroom was provided for members of the R.I.B.A. This year the R.I.B.A. Public Relations Committee, who have been responsible for the project, propose to enlarge the facilities offered by the Club so that it can be used not only by individual members but will allow parties or joint visits to be catered for. Mr. Greville Montgomery has provided a suite of rooms at the right hand side of the main hall from the Addison Road entrance. One of these rooms will be furnished as a lounge in which a refreshment service will be available, one as a writing and reading room, and another as a room in which parties can meet for meals. The Club will be under the direction of a member of the R.I.B.A. and a shorthand typist will be in attendance to deal with any letters that members may wish to send. Messages for members can also be received at the Club. A telephone and cloakroom will be provided. The Club can be entered from both the main ground floor and the gallery.

On the suggestion of the Public Relations Committee, the Council have decided to offer the use of the Club to members of the following bodies: the R.I.B.A. Allied Societies, the Architectural Association, the Building Industries National Council, the Council for the Preservation of Rural England and the Architecture Club.

“To all but the irreverent and the invincibly blind, the trivial and unworthy memorials with which our

fellow-countrymen are content to commemorate their beloved dead must cause profound shame and humiliation.” That opinion, which was expressed in an article in the R.I.B.A. JOURNAL three and a half years ago by Mr. A. Llewellyn Smith, secretary of the British Institute of Industrial Art, would meet with no denial from architects. The deplorable vulgarisation of almost every graveyard in the country has continued without any noticeable change, except for the worse, despite a growing force of opinion. Before there can be any improvement two things are necessary. A radical change in the public's idea of what is seemly, and facilities for the cheap and efficient supply of better memorials.

Since the first of these can only come slowly and only by an improvement in the supply of good monuments, the formation of an organisation directly for the purpose of providing good memorials and headstones is a notable step forward. The purpose of the organisation will be not only to try to persuade the public to use stones appropriate to English graveyards but to supply good memorials at prices comparable to those charged by the marble dealers and the hack monumental masons. It is directed by a strong committee with Mr. Gilbert Ledward, A.R.A., as technical expert on all sculptural matters.

We who are architects do not always realise the difficulty experienced by ordinary men, even the more enlightened among them, in getting anything better than the shameful normal. The ordinary memorial mason will do all he can to sell a marble headstone or a marble figure of a pseudo Canova angel or an ivy-clad broken column; he receives them ready made from Italy and knows no better. He can with truth point his client to the cemetery and say “Of course, sir, I can do you a headstone in Portland stone, but it's not usual. I find most of the people who come to me prefer a monument of this kind . . .” and so with recommendations that it will look like new, as it will, a century hence, and that to have anything else would be “unusual,” he can generally succeed in exploiting his client's desire for economy and modesty to the advantage of a quick and straightforward deal and the destruction of what beauty may remain in the graveyard. This ordinary person knows no place where he can get the memorial he wants without having it specially designed, which he thinks expensive, and even if he wants a specially designed memorial, does not know how to get into touch with a designer. If the publicity of *Sculptured Memorials and Headstones* is good enough to penetrate to every corner of the country, all this should now change once and for all. We suggest that copies of the organisation's admirably illustrated booklet should be hung in the porch of every parish church in the country and in the offices of every municipal cemetery. But those are elementary things which probably occurred to the organisers weeks ago. Architects who want to know more should write or telephone to 12 Lower Regent Street (Telephone: Whitehall 8771).

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RANWORTH

SOME PAINTED SCREENS OF NORFOLK*

BY OLIVE M. BRIGGS

PART OF THE R.I.B.A. PRIZE ESSAY, 1934

DURING the early fourteenth century many Flemish weavers settled in the county of Norfolk. This migration had begun as far back as the twelfth century, and from about the middle of the sixteenth century they were reinforced by Dutch and Walloon refugees. It was during this period, from 1450-1550, when the wool industry was growing and there was general prosperity, that most of the painted screens were built.

During the "Wars of the Roses," from 1455-1485, royal patronage was obviously withheld from the arts. But Norfolk, as a centre of the wool industry, had become one of the wealthiest counties of England and was little affected by the Civil Wars, as we can see by consulting the Paston Letters, which cover almost the whole of the century from 1422 to 1509. The patronage of the Arts now passed into the hands of the mercantile classes and the smaller country gentry who were concerned in the wool industry.

When Henry VII succeeded to the throne in 1485, order was more or less restored, and the country entered a period of comparative prosperity. We must therefore suppose that there was a centre or school of painting in

*Unfortunately it has not been possible to reproduce any of the numerous coloured and other drawings which illustrated the original essay.

All the photographs reproduced were taken by the late Mr. Brian C. Clayton, of Ross-on-Wye, and are the copyright of Messrs. B. T. Batsford and Will F. Taylor. [Ed.]

Norwich itself, and that screen painting was an art indigenous to England, with its chief centre in Norfolk. Screens were a particularly suitable form of church embellishment, as the painting could be spread over a long period and the cost distributed amongst several donors, as at Cawston, Aylsham and North Burlingham.

In small churches the screen was merely placed across the east wall of the nave, as at South Burlingham, in aisled churches it was fitted between the piers of the chancel arch, as at Cawston, or it was often prolonged north and south across the aisles. At Ranworth the screen extends right across the east wall of the nave. Worstead provided still another type, where the aisles are continued beyond the east wall of the nave to form chapels, and, as well as the chancel or rood screen, we have two screens on the same plane, one on either side separating the aisles from the chapels. At Barton Turf only the south aisle is continued and separated from the nave aisle by a screen, the lower part of which is all that now remains.

The screens were of two parts, the upper part of open or traceried panels, so that the high altar might be visible, the lower part sometimes more or less open, as at Walsoken, or more frequently of solid panels either carved or painted. In East Anglia the lower panels are almost always solid, and painted with angels, saints or prophets, or simply floral patterns or powderings as at South Burlingham. The sills were nearly always massive,

and often very effectively moulded, and as a rule they run right through from end to end, under both doors and panelling.

In East Anglia the design of the screen is architectural, with a careful use of buttresses, pinnacles, string courses and hood-moulds, and a battlement is sometimes used instead of open cresting; the mouldings are reminiscent of those of stone-work and the stone cornice which crests the external walls.

The East Anglian screens are furthermore distinguished by their lightness of structure, and delicacy and refinement of proportions, in tracery, cusping, and similar details. They were constructed and carved to be decorated with colour, and therefore line was important, rather than texture. They are more lofty than those of the west country, and more restrained in design and treatment, and the lofts where they exist are narrower. At Cawston a sturdy crocketed ogee was introduced to stabilise the great height and scale of the whole structure with the heads of the panels below the rails. This plan is further elaborated at Elmham and elsewhere, by filling the spandrels above with charming human and animal figures in full relief, or with large floral designs in gilt,

and generally with a background of colour, as at Eye and at Yaxley.

The final manifestation of the East Anglian tradition is characterised by a new naturalism, and when this phase appears the tracery is normally suspended, and its place taken by a narrow fringe, single or double as the case may be, of slender cusped archlets having the appearance at a distance of delicate tendrils of gold. In Norfolk this carving is often repeated within the large crocketed ogee under the arch, as at Marsham and Worstead. This peculiar development of the ogee is one of the most striking contributions of the Norwich workshop, and is part of their solution of the problems of the increasing loftiness of their screens, and the increasing areas of the great east windows of the period, both of which made the older and more complicated tracery of little or no effect. When instead of this compound and acute treatment, the ogee is depressed, as at Ludham, it is often accompanied by a small crocketed member curving inwards from the side of the vaulting arch and so forming a charming circular figure into which the ogee is sturdily projected, as at Bramfield.

THE METHOD OF PAINTING AND COLOUR

The paintings on the screens of Norfolk show Flemish or German influence, but there is documentary evidence that the craftsmen were mostly English. Between 1373 and 1579 there were many artists resident in Norwich, local names occur such as Frenze, Bradwell, Ale, Castle-acre, and Hickling. It is remarkable that this development of decorating screens with figures should have taken place in Norfolk. It certainly owed nothing to foreign precedent. These painted screens are concentrated in and around Norwich, indeed there are nine in Norwich itself, and the school must have been very flourishing.

* * * *

Before the sixteenth century, woodwork was usually decorated with colours and gilding, and sometimes ornamented with raised gesso, and often the carving was left unfinished, to be completed by such decoration. The late sixteenth century carved and gilded furniture is, in nearly all examples, completed by the gilder, who puts in the final details of veining with his pointed sticks used with water whilst the preparation is still moist. The colours and gilding have mellowed with time, but where they still exist are as pure and translucent as when they were first applied.

All the screens are made of oak, carefully freed from impurities, and then prepared for decoration with whiting made from finely powdered chalk, and grounds prepared entirely from oil were not uncommon. The coats were applied in succession, each carefully rubbed down when dry until the grain was filled, and the surface rendered level and smooth. The parts then intended for gilding were prepared with "Belarmeny" (bole-armoniac), a

yellow unctuous clay (curiously enough, this was also employed at that time for the stanching of blood). It is this brownish or yellowish earth, impregnated as it is with oxide of iron, which gives the old gilding its warm lustre.

The raised gesso was formed either by building up on its ground, or by cutting into it, according to whether the ornament was to be in relief or intaglio. The mediæval system of colour was to use each tint (save white, which is usually the colour of parchment) in its purest and brightest form, avoiding a large excess of any one colour. The paint was applied very fluid in the smallest possible quantities, and an even surface was produced, absolutely free from brush marks and without obscuring the fine contours of the mouldings. The colour was also laid on very thinly, probably in two coats, and the surface had a wonderful bloom (in most cases destroyed by the application of varnish). The gilding seems to have been often laid on a red ground.

The palette of the Gothic luminers of woodwork was restricted to the earth colours, and occasionally one of mineral or vegetable basis completed the gamut. These colours, together with gold in leaf or powder (brush gold form, were nearly always used in accordance with the law of emblazonry, colour on metals, or the reverse, and rarely colour upon colour.

Of colours and metals we get the following sequence, gules, vert, azure, argent (white used for silver), or, sable. Yellow is sometimes used for work of lesser importance and ranks in heraldry as a metal. But the early heralds did not keep this rule closely; pictorial representation of people were usually coloured "proper," that is with the natural hue, of flesh, but the heraldic system of

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alternation and counterchange was adhered to where possible in the majority of cases.

The most popular colours were red and green, with a good proportion of white and gold—the red of poppies, green of grass and the gold of corn—whilst deep hollows and the undersides of coving and vaults are usually painted blue, a colour very rarely employed on a vertical surface. "In many cases where blue has been used it has faded, leaving the plain oak. The painters, no doubt, discovered this and used it sparingly." (W. Davidson.) There was considerable use of blue on the screens at Ranworth and North Walsham, and at Bramfield the panels of the groining are painted blue and studded with gold, as they were also, no doubt, in the font cover at Trunch.

Carving is nearly always gilded, though the interstices, difficult to reach with the gold leaf, are generally coloured, and the berries of a trail of foliage are sometimes painted red or purple shading to green. Black is used in moderate quantities, as at Potter-Heigham. It is usually twisted with gold round a bead after the manner of a barber's pole, and it is invaluable for throwing up the purity of the colours. The figure work at Ranworth is quite distinct from that at Ludham, yet they are quite near each other, but in the case of mouldings, floral ornament, and diapers, we find much repeating.

Of pigment mediums, both oil and tempera, yolk of egg, or size, appear to have been used indifferently according to whether a luminous or non-reflecting finish was desired. Through many coats of varnish it is difficult to distinguish which medium was employed, as the different methods were probably used interchangeably. Linseed oil was sometimes used, as in St. Stephen's Chapel and at Ely, and is referred to by Theophilus in his *Schedulam Diversarum Artium* as early as the eleventh or twelfth centuries, but it was a treacherous medium unless thoroughly purified. The lime method seems to have disappeared by the fifteenth century, and was superseded by a tempera size medium which was preferred, as it produced a richness and luminosity equal to egg, and could also be used to make an emulsion with oil.

At Eton College, oil carefully flattened and very thinly applied was used on the wall, but in East Anglia, as at Ranworth, Barton Turf and Ludham, a tempera with fish size was popular. At Cawston the last six panels are in oil on vellum, and the others are in tempera, and here the gesso work, with touches of red, blue and green in the sinkings, is exquisite. (The finest examples are at Southwold.) The gesso work at Trunch and Marsham, which must originally have been very fine, is now much defaced. At Ranworth we find instead of gesso little carved wood squares, set with cavettos at intervals and little cast lead star-shaped ornaments, which seem to have been gilded. On the exquisite little pulpit at South Burlingham these lead stars are used with admirable effect. At Worstead, in the chancel screen, the spandrels of the figure panels are filled with cast lead of a lily pat-

tern (this is of a later date). The value of gold in decoration is, in this screen, seen at its best. Though much has been used, it has been used so judiciously, that it is not forced upon us, nor is its value cheapened. It is applied as an overtone, which seems to pull the design together, preserving the flatness of surface so valuable in all architectural decoration.

The cusping, crocketing, carving, gesso work, small heads, fillets, flat cavettos, carving of cornices and dadoes of figure panels, and face of buttresses were usually gilded, but, even so, gold was used with economy and we rarely find it on the back of the screen or on the roof, where it is superseded by yellow, sometimes very successfully. The western side is much more elaborate than the eastern. Everywhere in these Norfolk screens is seen the individual touch of the craftsman. "At Ranworth, the apparent reckless spacing of the diapers and rosettes is most astonishing. Nearly everything seems to have been spaced by eye; if a stencil were used, the patterns must afterwards have been touched up by hand. So, too, at Cawston no two diapers of the background are alike. The ornament varies so much that it is certain most of the spacing and dividing must have been done by eye." (W. Davidson.)

Where there is a dado band on the panels we find the upper part of the head of figures, red and green alternately with the lower part, and adjoining panels, as at Cawston. The traceried panels above at the spandrels being similar in colour to the lower part of the same panels. These dado bands are often in gesso, as at Cawston and Aylsham.

The main cloak or robe nearly always contrasts with the background, for example, a green robe on a red ground, and vice versa. In some cases the green cloak would merge perhaps into brown, and the red cloak into a blue, red or purplish shade.

Vaulting panels are generally blue with the usual powdering of gold stars, but at Bramfield each blue panel has a small gold angel outlined in black. In the exceptionally elaborate painting of the vault at Ranworth the panels are white with wonderful sprays of foliage. The beams supporting the lofts generally have the heads of their mouldings decorated with a "barber's pole" in black and gold, and the usual "wavy ribbon" treatment on the ogees, in most cases there is also a gold cresting running in a blue hollow. The painted wave ornament on the ogee moulding at Cawston is green and white in each bay, alternately with a red flower on the white, and a gold flower on the green and red. The red, green and gold is thus carried throughout the design. At Ludham the upper parts of the panels were of blue, with the lower parts in red and green alternately. At Lessingham much blue is used, and it has faded a great deal. Gold is more lavishly used in East Anglia than in other parts of the country and the general effect is much richer. Although the same series of colours is used in almost every example, they are blended in different proportions; for instance, Ludham is a gold

and red screen, while at Ranworth soft green and vermillion are about equally balanced. The under-drapery of the figures are usually of gold with rich designs and diapers drawn upon them. The variety of these designs, their wealth of subject, the skill and masterly execution, and the harmony of the scale of proportion on these robes are wonderful. Ranworth and Southwold are storehouses of the most beautiful patterns.

The balance of tone was preserved, and harmony

is always apparent. The decorative value of these screens is unquestionable. "They create a mystery of feeling about the church, they soften the glare of the often too large east window. They blend into the colour of the glass and tile work, and form a background to the high altar, and carry the designs of the stalls and colouring of the tiles up to join the panelled painted roof with its graceful line of hammer-beams or painted arches."

THE SUBJECTS DEPICTED

The saints painted in the panels of the screens and pulpits in East Anglia are, many of them, real works of genius, very far in advance of the quaint daubings of the Midlands, or the artless efforts of Devon. The level of attainment is by no means equal, the figures in the Suffolk screens at Eye and Yaxley are very indifferent workmanship, though they fit very well into the general scheme of decoration; but those at Ranworth, Hunstanton, and Thurlham, mannered as they are, are works of real skill. The faces are delicately drawn, the figures are well proportioned and supremely decorative, whilst the golden robes are exquisitely diapered with the finest damask patterns, evidently copied from real fabrics. The decorative accessories including the symbols carried by the figures; swords, keys, boats, crowns and croziers are charmingly conventionalised. The nine orders of angels painted in the blue panels in the North aisle screens at Southwold are even more decorative. Their huge gold wings and delicious garments decorated with jewels, bells and pomegranates, and the symbols by which the various orders are distinguished, are wonderfully effective, and the faces are refined and beautiful. Barton Turf has a similar series with beautifully and mysteriously vested figures, marred only by the extraordinary size of their bare feet. These paintings are intentionally flat and conventional in treatment, but in many screens, notably at Cawston, and the nave screen at Southwold, the figures are treated more or less naturalistically, with heavily modelled drapery,

and easy though sometimes exaggerated poses and very expressive faces. These figures are only kept in their place in the colour scheme by the heavily gessoed backgrounds. At Cawston the flower painting behind these figures is exceptionally fine and varied.

The screen painting at Loddon deserves special mention as it consists of a series comprising several figures. The technique is also different, for instead of being treated as a simple oil painting, these schemes are drawn with a thick black outline very firmly and decidedly, evidently by a hand used to the design of stained glass. The screen at Loddon resembles that at Talcolneston. The subjects represented are:

The Nativity.

The Adoration of the Magi.

The Circumcision.

The Martyrdom of St. William of Norwich.

The panels are drawn in firm, black outlines on a cream ground, the robes being mainly in red and green, with details in gold. In several of the series a landscape background is introduced, and the subjects are handled vivaciously and fairly skilfully—although the general effect is rather provincial.

St. William was apprenticed to a tanner in Norwich in the early twelfth century. He was enticed into the house of a Jew and then crucified. This panel helps us to date the screen, as the man to the left is wearing the costume favoured between 1520-30.

THE RANWORTH GROUP

RANWORTH

The subjects of the East Anglian screens are Saints, Martyrs, Bishops, Apostles and Angels, and they are of different types, archaic, conventional, decorative, and naturalistic; and amongst those of the decorative type *Ranworth* is pre-eminent for its size, state of preservation and workmanship, for clever invention and harmonious spacing. All the panels are specially designed for their position. The magnificent painted rood screens and reredoses to the side altars form a composition which is unequalled by any now existing in a district famous for its screens. "Marham has finer and more delicately painted floral ornament, Cawston has a better sense of proportion in

the section of the mouldings, and more character, almost too much character, in some of the heads of the saints, for example, St. Philip and St. Matthias; Barton Turf has more spirituality of feeling in the figures, and is probably finer in the technique of its paintings; but the uniqueness of the Ranworth design with its parclose, and double-vaulted canopy amply compensates for any deficiencies."

Although the paintings show traces of several hands, the unity both of design and colour suggests the presence of one controlling mind. The oak panels were covered with a thin gesso, the figure and other details were then

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drawn in with black, and the painting carried out with a viscous distemper medium, probably with a size tempera.

St. Thomas—a favourite saint of the neighbourhood—and, as Professor Borenus has shown in his interesting book, *St. Thomas Becket in Art*, a popular saint throughout Europe, is represented with a "T" on his chasuble and the apparel of his alb; he is also shewn at North Burlingham, and in a fresco at South Burlingham. In the SS. Michael and George it would be interesting to compare the fanciful costumes with the work of the Netherlandish masters. But the faces are purely English, and the feathered body of St. Michael is typical of the district—compare, for example, the Archangels at Barton Turf, and even more the St. Gabriel at North Walsham. Again, the angels on the reredoses who hold up the flowered dossal to the main figures should be compared with the angels in the "Doom" pictures in the Chapter House at Westminster. Angels are also used in the same way by the "Master of the Ursula Legend" who was working in the late fifteenth century, and are indeed a feature of the North European art of the time. At Aylsham, and perhaps formerly at Marsham, there are angels, graceful and small in scale, who place their hands on the curtains, and stand against a blue ground.

The screen at Ranworth consists of eight bays with the opening to the chancel in the two central. Beyond the screen are retables on the north and south with subsidiary altars below, and projecting into the nave are parclose screens with flying buttresses, which shield the parochial altars. The groining of the vault was formerly a double-vault, of which the outer members have disappeared together with the loft itself. The original effect of this double-vault must have been very rich indeed. The parclose screens are of panelled framing, the principal parts assisting in the support of the loft beam. The outer sconce posts are braced to those behind by richly painted flying buttresses. From the junction of these with the outer shaft, springs an ogee-shaped rib, ornamented above and below with crockets rising with a graceful curve to join the middle shaft, the outer edge of which on either side has been mutilated. This very rare architectural feature is one of the chief points of interest of the screen. They serve to support the loft and also to give the nave altars definition, and the half-seclusion the ritual demanded. The double groining was supported by the insertion of an intermediate bressummer in the floor of the loft. The original effect of this screen with its painted pendant double-vaulting before the chancel, the retables complete with their delicately tabernacled niches, pierced cusped arches, and decorative vaulting above; the whole surmounted by a rood loft of equal richness of design must have been one of great beauty.

The details of paintings on the robes of the saints are both choice and curious, and are worthy of notice. The under-robés are gilded and outlined in black, dark brown or red. The diaper patterns on these robes are an instance of the love of the early painters for quaint conceits in the introduction of beasts or birds with their



NORTH BURLINGHAM

floral or conventional ornament. On the robe of St. Simon there is painted a chained dog; on St. James-the-Greater, a dog chasing ducks; on St. Peter, a hawk striking a leveret and also a sporting dog; St. Paul, a spaniel with a bell on its collar attacking a duck, and St. Mary Salome, a hawk tearing the eyes of a hare. All the hunting scenes are suggestive of English art, but those in which water-fowl are the subject, point closely to a local origin and a power of adaptation of design on the part of a great artist. Brocaded robes are a feature of Gothic art and it has been suggested that the patterns were derived from the trade with Venice, and the Italian gowns used by the clergy; but surely the playfulness of the East Anglian development is unique? The small flowers, for example, ragged robin, forget-me-not, yellow iris, poppy, and marsh buttercup are introduced everywhere on the mouldings and the panels of the vault, and are faithful representations of the blossoms of the district.

The twelve panels of the centre are the earliest. On these are shown the Apostles, represented thus:—

Sancte Simon	emblem a fish
Sancte Thoma	„ a spear.
Bartholome Sancte	„ knife and book.
Sancte Jacobe	„ pilgrim's staff and book.
Sancte Andrea	„ cross and pouch at girdle.
Petre	„ keys and book.
Sce Paule	„ sword and book.
Sce Jones	„ chalice and dragon.
Sce Phillippe	„ basket of loaves.
Sce Jacobe	„ a fuller's club.
Sce Jude	„ a boat.
Sce Matthee	„ a sword.

"Commonly all the apostles ben painted barefoot in token of innocence and of penance. Natheless they went not alway barefoot, but sometime with goloches, a sole beneath and a fastening above the foot. Also the apostles and other saints ben provided with mantles in token of the virtue and poverty which they had. For, as saith St. Gregory, all these worldly goods ben naught else but a clothing to the body, and a loose clothing not fast to the body, but loose and lightly may be done away. Right so the goods of this world were but a mantle to apostles and other saints." (*Dives et Pauper.*)

The grace of the figures and the fold of the drapery are worthy of study. No two coronæ are similar in design, no two vestments are alike in pattern, whilst the backgrounds are alternately red and green, and the diaper-pattern is varied. As well as the central screen, there are also two retables for altars at the east end of the nave, consisting of four panels with figures of saints, and two parclose screens with three panels, one above and two below. The figures in the reredos screen are larger in size. On the south are:

St. Mary Salome, the wife of Zebedee, with SS. James and John as children.
The Virgin and Child.
St. Mary Cleophas with SS. James, Joseph, Simon and Jude.
St. Margaret.

On the north are:—

St. Etheldreda.
St. Agnes, or St. Mary of Egypt.
St. John the Baptist.
St. Barbara.

The finest paintings are those on the inner sides of the parclose screens. On the north are:—

St. Felix.
St. Stephen.
St. George.

On the south:—

St. Thomas à Becket.
St. Lawrence.
St. Michael.

All the figures are worthy of description, but it would take a complete thesis to do this beautiful screen justice; and I shall only mention the figures I find particularly

interesting. The St. Barbara stands against a red ground, she wears a blue cloak and a gold skirt with a rich design in brown line, of a dog and a swan. In her right hand she holds her emblem, the tower, and in her left the martyr's palm, "with all the dignity one would expect from the patron saint of the noble profession of Architecture"—the grace of pose, the beauty of the head, and the sweetness of colour are remarkable, and it reminds one of Van Eyck's incomparable masterpiece, his drawing of the same lady, now at Antwerp.

"St. Barbara, the only daughter of a wealthy noble of Heliopolis, named Dioscorus, was imprisoned in a tower built especially for her, because her father loved her dearly, and was afraid lest some suitor might take her from him. From this tower she could only see the sky. Her attendants converted her, and she was baptised. Now her father, Dioscorus, ordered skilful architects to build her a bathroom with two windows. The saint wished for a third, and told her father 'thro' three windows does the soul receive light, the Father, Son, and Holy Ghost.' These words, though apparently so harmless, infuriated her father, who drew his sword to kill her. She fled to the top of the tower, and was thence miraculously carried to a distant spot, where she hid for several days, until betrayed by a shepherd. Her father, whose love had changed to hatred, dragged her to a dungeon, where she was scourged and tortured. Finally he took her to the top of a high mountain, and cut off her head. He was immediately killed by a thunderbolt." So runs the legend.

Again, notice the two extremely decorative panels of SS. Michael and George, which are amongst the finest remains of mediæval painting decoration in the country. To begin with the latter, the design is magnificent, the calm dignity of the expression and feeling of reserve power in the saint contrast with the fierce and ineffective fury of the dragon. Against a red ground, St. George stands with sword uplifted in his right hand to smite the dragon at his feet. He is clad in armour, and this armour is treated very fancifully, and partly covered with a light tunic marked in front with a red cross; on his left arm he carries a shield, again with a red cross. The Archangel Michael is slaying a seven-headed dragon, in his left hand he holds a highly decorative and decorated shield, with a pointed boss of gold, and thereon is a cross of glory. This cross is repeated on his breast, on his head is a rich crown and around his shoulders a jewelled cloak. This panel is beautifully designed and has considerable charm of colour, and the line of the red wings seems to encircle the composition.

But to mention part of Ranworth screen would be an injustice, for its beauty is such that it must be seen to be appreciated.

FILBY

Near Caister, in the village of Filby, there is a very fine screen with naturalistic ornament in the buttresses similar to that of Marsham, and there are figures of St.

ground, a design at hand left the expect architect and the winds one wing of

table of a tower ed her like her in the sky. baptised. effects to the saint three windows, and the harm- kill her. miracu- several whose in geon, he took her head. So runs

panels of the finest country, went, the reserve Tective George site the armour with a light arm he hangel it hand with glory, a rich . This charm incircle

be an to be

a very tresses of St.

George and St. Michael which approximate very closely to the same figures at Ranworth. Also it is interesting to compare the brocade patterns on the gowns at Ranworth and Filby, for they are very similar, as are also the tiled floors. In this screen there are two green panels and then two blue, and the figures are balanced thus:—

i. St. Dorothy	viii. St. Barbara
ii. St. George	vii. St. Michael
iii. St. Catherine	vi. St. Margaret
iv. St. Peter	v. St. Paul

St. Dorothy stands against a red ground, and she wears a blue cloak lined with crimson over a yellow gown of rich brocade, with a pattern of a lion and trees outlined in black. She holds a garland of red and white roses with their stalks twining together similar to the garland in her hair.

St. George wears a fantastic and beautiful suit of golden armour, almost exactly like that of the same saint at Ranworth. He wears a short white surcoat with pendants from the shoulder, and his golden helmet has a twisted white wreath and is of great magnificence. The shield is also elaborately beautiful and has a red cross, and the dragon has golden scales.

St. Catherine stands against a green ground. She wears a crimson cloak lined with white over an elaborate golden brocade gown, a golden crown, and carries a golden sword with a vermillion hilt and a vermillion book, and she stands upon the wheel, the emblem of her martyrdom. St. Catherine was of royal blood and great personal beauty, consummate wisdom, and marvellous courage and endurance. In *Dives et Pauper* it is recorded that "St. Catherine is painted with a wheel in one hand in token of the horrible wheels which the tyrant Maxentius ordained to rend her limb from limb. But the angel destroyed them, and many thousands of heathen people, so they did her no harm. She hath a sword in the other hand in token that her head was smitten off for Christ's sake."

NORTH AND SOUTH BURLINGHAM AND GOODERSTONE

The screen at North Burlingham also belongs to this group. In this example the saints stand on white hexagonal pedestals. They are:

- St. Withburga, crowned and carrying a church and two doves.
- St. Benedict, with book, pastoral staff, and two devils at his feet.
- St. Edward the Confessor, with sceptre, ring and cockle shells on his bag.
- St. Thomas à Becket, with sword or staff.
- St. John the Baptist, with lamb on book.
- St. Cecilia, with crown of flowers in one hand and a palm leaf, and with wounds in her neck.
- St. Walstan, crowned, with a scythe.
- St. Catherine of Alexandria, with book, sword and wheel.
- St. Edmund (almost obliterated).
- St. Etheldreda, crowned, with a pastoral staff.



NORTH BURLINGHAM

Three of the saints are intimately connected with East Anglia: St. Walstan, the patron saint of agricultural labourers, was born at Bawburgh, near Norwich, and his burial place there became a favourite resort for pilgrims. St. Etheldreda, the daughter of Anna, King of East Anglia was married, but left her husband, vowing perpetual virginity, and founded the convent at Ely; St. Withburga, her sister, was the abbess of a convent near East Dereham, where she and her nuns were miraculously fed in time of famine by the milk of two does.

The screen at North Burlingham was the gift of various worthies of the parish about the year 1528, and until recently some of the names of the donors could be deciphered: for instance, "Joannes Blake et Cecilia Uxoris Suæ," as well as those of John and Thomas Benet and his wife Margaret, and Robert Frennys (*ob. 1528*). This screen is a good example of the archaic type, the upper part of the panels is painted blue with red and green alternately below, and although nearly all the faces have been destroyed the screen has a distinct artistic charm.



GOODERSTONE

At South Burlingham the screen is decorated with simple floral patterns, and the pulpit is one of the most beautiful and complete examples of East Anglian colour decoration of the fifteenth century. The panels with their ogival tracery and crocketed pinnacles are in red and gold on a green background, with sprigs of flowers in gold. The central part of the panel immediately beneath the cusping is in red with a diaper pattern of the same gold flowers. The mouldings, buttresses and the cornice are all painted, and the effect is completely delightful.

At Gooderstone the screen is decorated with the figures of the twelve apostles carrying scrolls with sentences from the Creed, and the four Fathers of the Church, and the arrangement is similar to that at Ranworth. At the top of each panel is a feathered angel holding up a brocade dossal, and there is a similar use of red flowers and green foliage on a white ground on the mouldings. The workmanship is less skilful and the decoration less rich than in the examples already mentioned.

BARTON TURF

The screen at Barton Turf was built about 1400, and the paintings were probably executed at the end of the century, c. 1480-90, and it is thus earlier than Ranworth (which is usually dated as the first quarter of the sixteenth century). This screen is the finest representation of the angelic hierarchy in English mediæval art—the only other example in East Anglia being at Southwold. The predominating colours are red and green, the backgrounds alternating with the robes and the haloes, feathers and details on the gowns being in gold. The connection with Ranworth appears in the types and treatment of the drapery, and in the rayed crowns and feathered bodies of some of the angels. Two are clad in armour, which is a curious mixture of early and late forms, and therefore date the screen after 1480. The flamboyant tendencies of the costumes point to a still later date. The drawing equals Ranworth; the figures are varied in attitude and action, and a consistent attempt is made to give them solidity; they are treated decoratively and with imagination. "The qualities of the heads on this screen show great beauty of drawing, and the artist must have been deeply imbued with the holiness of his mission."

The panels represent:

- St. Apollonia.
- St. Zitha.
- Potentates.
- Virtues.
- Dominations.
- Seraphim.
- Cherubim.
- Principalities.
- Thrones.
- Archangels.
- Angels.

St. Barbara.

The Seraphim ("PHYN" only decipherable), form the first order, or choir, of the superior Hierarchy called Seraphim or Fury. For this reason they are represented against a green diapered background by a figure with red wings and plumage. Being endued with the Divine Essence they were appointed as chamberlains to be ever in attendance on God; and St. Dionysius, St. Gregory and St. Bernard all agree that they precede the Cherubim because "love divinely seated in the heart is above all knowledge or science which is in the head or understanding." He is crowned with a wreath of foliage with nine large golden rays; he has six red wings and plumage, and a golden girdle of clouds, an ermine tippet and a mantle green without and a light-coloured within, a thurible in the right hand and the left upon the breast. (Isaiah vi, 2 and 3.)

The Cherubim, "CHERUB," form the second order of the Superior Hierarchy. St. Jerome says that cherub signifies wisdom or intelligence, and others say power; but "wisdom and knowledge is power." The *Legenda*



BARTON TURF

Aurea gives "plenitude of wisdom" and they are covered all over with eyes emblematic of omniscience. The figure, against a green diapered ground, displays six wings and golden plumage covered with eyes, and wears a girdle of linen tied in a single bow, an ermine tippet with an ornamental border and golden mors and a mantle of blue (emblematic of knowledge). Both hands are uplifted in adoration. (Genesis iii, 24.)

Thrones, "TRONI," sitting in the heavens over all from the beginning (*Legenda Aurea*). The figure is represented against a red diapered ground, crowned with a wreath of golden oak leaves, with nine large rays of gold. He has six wings of varied plumage, a plain tippet fastened with a gold mors, and a green mantle with a jewelled border. He carries a pair of scales in his right hand, and a throne upon the clouds to his left indicates that the throne is established in righteousness. (Col. i, 16.)

There now follows the middle Hierarchy. "The figure representing "Dominations" stands against a green

diapered ground, wearing a scarlet chasuble with a jewelled orphrey, the amice visible at the neck, and dalmatic with a fringe of gold. He has four wings and carries a golden sceptre in his right hand—the golden tiara was effaced by Dowsing in his iconoclastic raid on the East Anglian "idolatries."

Then follows "Virtues." Against a red ground, he stands wearing a gown of pure white (emblematic of purity) with gold. He has four wings and blue plumage, a linen girdle and a plain tippet with the collar fastened with a mors, and a light coloured mantle. The right hand laid upon the heart, and the left carrying a sceptre, signify the readiness and ability of this order of angels to execute their commands.

The "Powers" are represented by St. Raphael crowned with a wreath upon a helmet with an enriched nimbus and small rays. The archangel wears a gold and varied plate armour, with vertical lines of the plates, tuilles and pointed sollerets. He has four wings and a girdle of bells, and a richly decorated golden mantle





LUDHAM

fastened with an embossed morse, and a rich ornament attached to the breastplate, and he stands upon a chained demon gnashing his teeth—the background is red. (See *Colossians i, 16*, and *Ephesians i, 20 and 21*.)

The inferior hierarchy are now represented; and first there is "Principalities" represented by a figure wearing a richly ornamented crown and nimbus. He has four wings of light red plumage, and stands against a green background. The girdle has two rows of bells, the upper row with clappers, the lower circular, and the tippet is richly embroidered with a golden morse. He wears a light-coloured mantle and in the right hand carries a vessel like a bottle, and in the left a palm branch signifies the spiritual nature of their dominion. (See *Colossians i, 16*, and *Ephesians i, 20 and 21*.)

Then follow the Archangels, represented by St. Michael wearing plate armour and crowned with an embossed orle adorned with leaflets, and with only the two upper wings visible. He wears a girdle of bells of different sizes, and a green mantle is thrown over all, the left

sollaret is partly visible. He stands against a red background, on a citadel which he guards with a mace in his right hand and a sword in his left.

The Angels (see *Matthew iv, 11*) are represented by a figure with an ensigned crown and flowing hair, wearing an alb and a girdle with an alms box, and two naked figures (souls) at his left side kneel on a rock. The right hand on his breast, and the left bearing a massive golden spear, signify that they are the defenders of individuals.

Of the remaining figures:—St. Apollonia carries an enormous pair of pincers to show that her martyrdom was achieved by extracting her teeth. The St. Zita, clad in the costume of her day and carrying the keys and purse of a housewife, is a dignified and expressive piece of work. This saint born in Italy in the thirteenth century became famous for the modesty, meekness and efficiency with which she discharged her duties as a servant, and was regarded as the patron saint of those engaged in domestic work.

The paintings on the screen in the south aisle are of very different workmanship. They represent:—

Henry IV, with sceptre and orb.

St. Edmund, with sceptre and arrow.

St. Edward, the Confessor, with sceptre and ring.

St. Olave, with halberd and loaf.

The panels have apparently been cut down, so that they are seen three-quarter length. The figures are stiff and the drawing is coarse and the modelling elementary. Perhaps these panels formed part of an earlier screen displaced by the finer one now in the nave.

LUDHAM AND POTTER HEIGHAM

Near to Barton Turf, in the village of Ludham, there is another fine screen belonging to the Ranworth group. The screen is dated by an inscription:—

"Pray for the sowle of John e. Cycyli
hys wiffe that gave forte (14) pode
and for alle other bufactore. Made
in the eyere of ower Lord God 1493."

The design is good and the detail rich.

This screen consists of eight bays, and the twelve panels have the names of the saints inscribed on white bands. They are :

St. Mary Magdalene, with a box of ointment.

St. Stephen, with three stones in his hand.

St. Edmund, king and martyr, King of East Anglia, with an arrow.

King Henry VI, with sceptre and orb.

St. Augustine (334-430), mitre, pastoral staff and book.

St. Ambrose, patron of Milan, " " " "

St. Gregory " " " "

St. Jerome, (345-420) red robe and Cardinal's hat.

King Edward the Confessor, with sceptre and ring.

St. Walstan, crowned with a scythe (The East Anglian patron of farming).

St. Lawrence, with gridiron.

St. Apollonia, virgin martyr, with pincers and teeth.

The tracery consists of simple crocketed ogees, and rich cusping; the mullions supported by pierced buttresses and enriched with recessed panels delicately cusped. The carving of the tracery in the wainscot of the screen is very fine.

The types and the drapery treatment resemble that of Ranworth and Barton Turf. The panels are divided into two parts by a hand behind the head, as in the side screens at Ranworth, but the angels holding up the dossal are not introduced. The figures themselves, although rather short and heavy in type, are decorative in composition, and finely drawn and coloured, the poses are dignified and natural, and yet full of mediæval grace and charm. The lack of elegance is particularly noticeable in the St. Stephen, who is dressed as a deacon, in gold with green bands. The four panels representing

SS. Gregory and Jerome, SS. Edward the Confessor and Walstan are by a different hand, and are of very inferior workmanship. The figures are smaller, and there is no dado rail; even the diaper patterns are coarse.

The chancel arch is boarded in, and on the boards is a picture of the Crucifixion. These tympana, though common enough at one time, are now rare. After the Reformation they were often painted over with the Royal Arms to prevent idolatrous worship. In this case the Arms of Elizabeth were painted on canvas with the inscription "non me pudet evangeli Christi vivat regina Elizabeta," and now face the altar. The most famous tympanic screen is at Wenhampton, Suffolk.

Near Ludham in the village of Potter Heigham, there is another interesting screen belonging to this group. Like its neighbour it is also a variation on a gold and red theme, with little use of green, the mouldings are rather coarse, and black is used with good effect. The figures mostly wear gold and white; SS. Eligius and Augustine wear the usual Bishop's dress, but St. Ambrose is wearing a red gown and hat. The panels represent:

St. Mark,
St. Augustine,
St. John.
St. Gregory
St. Jerome,
St. Eligius,
St. Luke,
St. Ambrose.

It is quite usual to balance the four Evangelists by the four Doctors of the church—but why was St. Eligius, the patron saint of farriers, substituted for St. Matthew?

N. WALSHAM, E. RUSTON, TUNSTEAD AND EDGEFIELD

North of Ludham, there is a fine screen at North Walsham, where the figures resemble those at Ranworth; they are large and fill the panel which has no dado-band. The counter-change rule is followed fairly closely, the panels are in pairs, two red and two green, and there is considerable use of blue, as in the gowns of the second and fourteenth panels, and in the mantles of the fifth, ninth, twelfth and sixteenth. The mouldings round the panels have the usual naturalistic flower decoration on a white ground, typical of the Ranworth group. The panels represent:—

St. Catherine of Alexandria, with wheel.
The Annunciation.
The Angel Gabriel.
St. Jude, with a boat.
St. Matthew, with a money bag and a book.
St. Philip, with a basket of loaves.
St. Thomas, with a spear or lance.
St. Simon, with a staff or fish.
St. Peter, with mitres in the corner above the panel.

South side:

- St. Paul, holding a book.
- St. Andrew, with a cross saltire.
- St. John, with sword and palm.
- St. James, holding a shell.
- St. Bartholomew, with knife in sheath.
- St. James the Less, with a fuller's club.
- St. Barbara, carrying her tower.
- St. Mary Magdalene, with a box of ointment.
- St. Margaret, with a dragon.

St. Catherine is a particularly delightful figure. Her face has a most alive and spiritual expression, and the pose is graceful. She stands against a red ground, and has a gold crown and nimbus, and wears a golden mantle with a deep collar over a crimson gown. She carries a golden wheel and sword. The St. Gabriel is a crouching figure, wearing a fantastic head-dress in gold, with vermillion wings, lined white, and crimson gown trimmed with gold, beneath which the vermillion

feathers are visible. The hat is delightful and fantastic, cf. the "Ranworth St. George"; the ugly bare feet resemble the Angel's at Barton Turf.

The figures of the Apostles are rather similar to the figures on the Ranworth screen, except that their robes are not so richly coloured and brocaded, but they have the same kind and benevolent expressions, and in its original state, running across the aisled nave and choir, it must have formed a very beautiful barrier. Now, unfortunately, only the wainscot of the middle portion remains, and this much repaired and restored in the way of buttresses and cresting. At one time these buttresses must have been covered with the usual floral devices, as the few remaining fragments show.

The screen at East Ruston consists of six very wide bays, the two central forming the entrance to the chancel, and at this entrance there is an unusual arrangement of buttresses. The tracery is replaced by a mere fringe of cusped archlets as at Ranworth and Marsham.

On the north side are represented the four Evangelists, on the south the four Doctors. They are evidently from different workshops. The Evangelists have tall, bulky figures with coarse features. St. Matthew is represented by an angel with blue cloak, lined crimson, and an ermine collar over a golden robe, and golden wings lined green; he stands against a red background and forms a decided link with Ranworth. The other Evangelists are represented with their emblems, and the treatment of the haloes resembles those at Ludham. The Doctors are smaller and more slender, delicately painted in detail against a rich background, and in general character they recall the figures at Ludham, and the earlier figures at Lessingham.

The pilasters of the screen are decorated with a wavy ribbon ornament, and naturalistic flowers are introduced against a white ground. This resembles Ranworth and Tunstead. The figures stand on a tiled floor with an elaborate skirting drawn in perspective—this use of tiles is reminiscent of Ranworth.

The screen at Tunstead has the names inscribed beneath the figures, the background divided by a dado-rail and the plain floor typical of the Ludham screen, and the naturalistic floral decoration on the white beading of the panels is similar to that at Ranworth and South Burlingham. The figures are rather clumsy in the drawing, and represent the four evangelists (St. Paul substituted for St. Matthew) and the four doctors.

The screen at Edgefield, dated 1526, must have been very beautiful, but now, although it has been placed in the rebuilt church, the remains are much mutilated. There are four bays and a double bay still showing signs of colour, and the tracery above the ogee arches is very delicate. The panels of the parclose screen are very much defaced, but some still show the usual ribbon ornament with gold flowers and green ground, and there are fragments of figure painting.



TUNSTEAD

THE COAST GROUP

STALHAM, HEMPSTEAD AND LESSINGHAM

The second group of screens is situated near the coast. The screen at Stalham has been badly mutilated and only five panels now survive, much despoiled and dilapidated. They represent:—

St. Edmund.

A King, either Henry VI or St. Edward the Confessor.

St. Andrew.

St. Roch.

And a Bishop.

The treatment is linear—but the screen has been so badly defaced that no brilliance of colour or gold now remains. The St. Roch is rather attractive; he wears a short, red cloak (against the usual green ground) over a brown jerkin and red stockings rolled below the knee; his left thigh is bare, to expose the sore.

The St. Edmund (or as Keyser thinks St. Sebastian, another plague saint), has a short red tunic with a gold belt, a green cloak with gold buttons, and stands against a red background. He wears a white hat and carries an arrow. The king resembles the figures at Ludham. He wears a red mantle, lined white, with collars and cuffs of ermine over a blue gown with a large gold belt. St. Andrew wears a green mantle over a blue gown.

At Hempstead the surviving panels are on the south side of the chancel, those on the north side having been incorporated with a reading desk. The names are inscribed at the bottom and they represent:—

St. George, with spear and dragon.

St. Erasmus, mitred, holding a windlass.

St. Stephen, holding stones.

St. Lawrence, with a gridiron.

St. Blaise, with mitre and pastoral staff.

St. Francis, receiving the stigmata.

St. Leonard, tonsured with crozier.

St. Eligius, mitred, holding a hammer.

This screen is interesting for the number of unusual saints represented, and the prominence given to the craft element. St. Blaise is the patron saint of wool-combers, St. Eligius the patron of goldsmiths and farriers, St. Stephen of weavers, St. Lawrence of cooks, St. Julian, who is represented on the northern screen, was held in great reverence in the Netherlands, and the panel may have been given by a Flemish donor.

The figures have tall slender bodies and small heads, with round cheeks and protuberant foreheads. The modelling of the drapery is soft and full, giving the effect of high relief against the flat patterns of the backgrounds. They are in a direct line of descent from the later panels at St. Michael-at-Plea, Norwich.

At Lessingham the twelve panels originally carried

the Apostles, the background was divided by a dado rail, the upper part being blue, and the lower alternately green and red. The treatment of the figures is linear, with little modelling. Over some of these panels have been painted a further set representing the four fathers



HEMPSTEAD

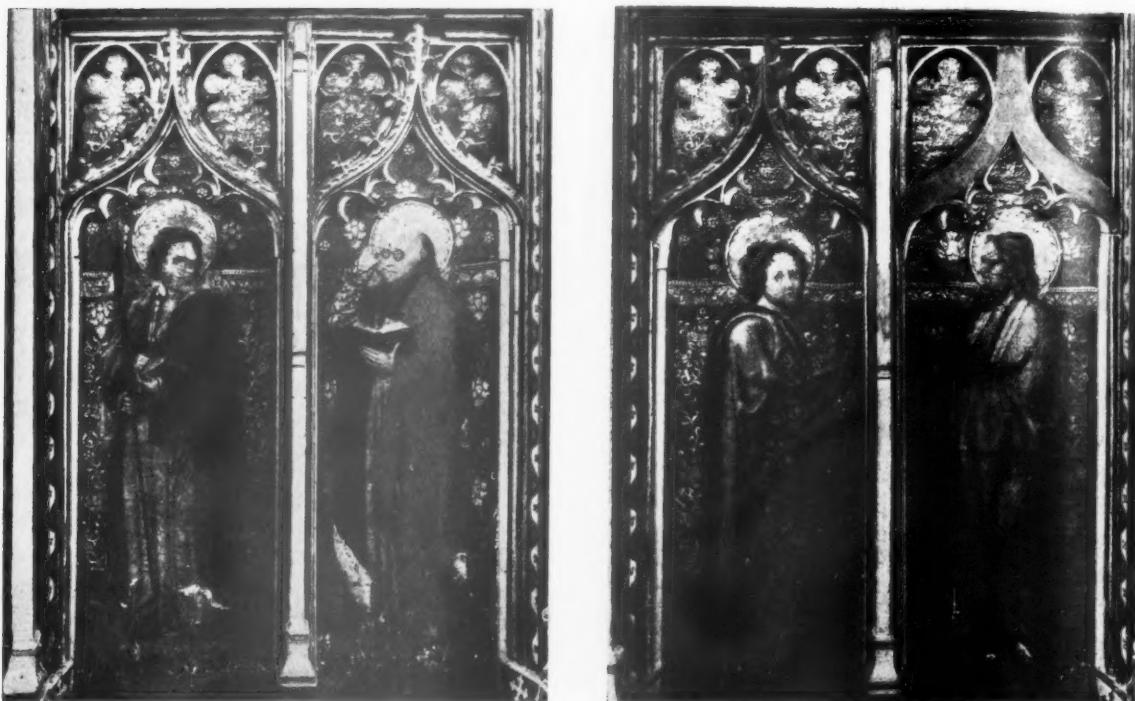
and a bishop (Keyser suggests St. Giles). Each figure is seated, and exceptional arrangement made possible by the width of the panels. The modelling is full, and resembles Hempstead, and in design they recall Byzantine originals. This screen shews a certain fusion between the Hempstead and the Ranworth types.

CENTRAL NORFOLK GROUP

CAWSTON

In the centre of Norfolk in the district near Aylsham, there is a very fine group of screens, and the finest of

these, and indeed one of the finest in England, is at Cawston. Martin visited the church in 1731, and he



CAWSTON

writes "The screen is as beautifully painted and as lofty as I have seen —. The ancient screen still remains and its twenty lower panels have finely coloured paintings of the apostles and other saints, including a remarkable one of John Schorn holding a boot into which he has just conjured the devil." In the eight divisions are eight saints very neatly painted:—

St. Agnes, with a lamb "leaping on her."
 St. Helen,
 St. (Thomas), a spear.
 St. John,
 St. James,
 St. Andrew,
 St. Paul,
 St. Peter.

On the door in four panes Scē Gregory, Scē Jerome, Scē Ambrose, Scē Augustine. On the right hand, eight more saints, the last scene a religious person. On the left hand of the screen "Pray for the soulis of William Athereth and Alice his wyff, the weche did these iij panyys peynt be the Executors lyff."

The rood loft was being built c. 1460, when John Barker gave ten marks for the "candle-beam."

The remaining figures are:—

St. James the Less.
 St. Bartholomew.
 St. Philip.
 St. Jude.
 St. Simon.
 St. Matthew.
 St. Matthias.

Sir John Schorn, who was rector of North Marston (Bucks) c. 1290, and acquired a great reputation as a miracle worker, on one occasion conjuring the devil into a boot.

The panels come from two different workshops—the first fourteen c. 1490, and the last six some fifteen years later. The earlier are painted on the panel, the figures wear elaborate mantles falling in mannered folds over rich brocade gowns, the heads, hands and feet have a hard outline, and the hair is arranged in wiry locks. The pose is varied and there is a marked attempt at individuality and characterisation. This is even more marked on the later panels, which are painted on parchment, cut to the shape of the figures, and probably stuck over earlier work. The drapery now falls softly and more naturally. The St. Matthew has his right hand raised to

adjust a pair of horned spectacles—was this to emphasise the experience necessary to a tax-collector? The St. Philip is finely posed with a strong simple treatment of drapery, a green cloak over a gold brocade skirt.

The flower painting behind the figures is exceptionally fine and varied. There are small buttresses on the face of the mullions, carried up a little above the springing of the ogee arches, and furnished with a crocketed gable, above which little crown-like terminations form the springing for the ribs of the canopy. The face of the upper part of the buttresses was covered with little niches containing small cast figures, two moulds probably having been used.

The rear of the screen has little or no ornament. Even the running pattern on the mouldings is discontinued. At the top where the loft has been removed, the screen has been crudely coloured alternately green and red—this is later.

AYLSHAM, MARSHAM AND WORSTEAD

Colonel Strange groups this screen with those at Aylsham (1507), Marsham, and Worstead (1512). The framework in every case is decorated with ornaments stamped in gesso, and the drapery is similar. But there are also connections with the Ranworth group, as for example, the backgrounds divided by a dado-rail (in these examples gesso is used), the tiled floors, and the use of wavy-line "ribbon" pattern with counter-changed ornament on the mouldings.

The screen at Marsham is lovely, the paintings in type resemble those at Aylsham, and must be of the same date (1507), the pose is forceful yet graceful, and the gold brocade gowns are beautifully modelled—the general effect is rich and striking. The figures on the north side of the screen have been badly damaged, and they may be earlier than the more graceful figures on the south side. On all the remaining panels there is a dado-band of gesso, those on the south being the more elaborate; the upper part of the panels have in every case been defaced and repainted, but there are still considerable remains of blue paint. The figures are difficult to distinguish, because, when the backgrounds were painted over, in many cases the emblems were removed, and all the faces have been destroyed.

North side: i. Female Saint with wool-carding comb, (S. Sidwell?)

- ii. St. James the Less with fuller's bat.
- iii. St. Thomas with a lance and book.
- iv. St. James with a knotted pilgrim's staff.
- v. St. John with chalice and serpent.
- vi. St. Andrew with cross saltire.
- vii. St. Peter with keys.

South side: viii. St. Paul with book.

- ix. St. Philip with basket.
- The x, xi, xii, xiii, are indecipherable, but undoubtedly represented the remaining apostles.

xiv. Bishop with a mitre.

The floral and other decorations at Marsham are much lighter and more graceful than those at Aylsham or Trunch, in fact, from this point of view, it is almost the finest example in East Anglia.

The panels on the north side of the screen usually follow the counter-change rule, except that the colour of the upper part is indistinguishable under the over-paint, but St. James stands against a vermilion ground and wears a crimson cloak lined with green over a golden robe, and St. John wears a golden cloak over a scarlet gown, and stands against a green background, and the female martyr wears a golden cloak over a brown robe and stands against a green ground.

The south side of the screen is more advanced, the gesso dado-rail is elaborate, but all the backgrounds have been painted a dark brown. Although these figures have been badly mutilated, the poses are still charming and graceful.

About 1730, Blomefield records an inscription running along the top of the panel part of the screen, "Orate pro animabus Johannis de Norton et Margaretae uxoris quoram animibus Deus proficietur."



CAWSTON

At Aylsham only the wainscot now remains; it is dated 1507, and very much resembles that of Marsham. The figures are rather small, short and plump, with drapery hanging in graceful folds. They were painted on vellum, and stuck on to the panel as at Cawston. The background is in many cases covered with a very fine geometrical and flowing gesso, and in the others with a brocade pattern. The general effect is very rich, and there is a considerable amount of gold. The gesso pattern in the dado rail is the same as at Marsham, and above it there still remain in several cases—and therefore probably in every case before the screen was mutilated—an angel holding up the dossal. The angels are very graceful and engaging; they place their hands upon the curtain and, although they are all very similar, they are treated in an individual manner. They stand against a blue background and have golden wings lined with red, and white gowns, and resemble the angels at Ranworth. The colour of this screen is very rich, most of the backgrounds are gold, as are also most of the gowns, whilst the mantles are usually red or green.

The north side of the screen was protected by a pew, but the south was badly defaced.

The panels represent:—

- i. A Prophet wearing a hat.
- ii. St. Thomas with nimbus and lance.
- iii. A Prophet wearing a hat.
- iv. St. James the Less, with fuller's bat.
- v. St. Philip.
- vi. St. James with nimbus, hat and staff.
- vii. St. John the Baptist with lamb on book.
- viii. St. Peter with keys and book.
- ix. St. Lawrence with gridiron.
- x. St. Paul with sword.
- xi. St. Andrew with cross.
- xii. (unidentifiable)
- xiii. St. Simon with fish.
- xiv. St. Jude with oar.
- xv. St. Matthias.
- xvi. St. Bartholomew with knife and book.

The first prophet wears a blue cloak over a gold brocade gown, and a scarlet hat. The second wears a violet-pink gown with a red cloak, like a doctor's, and a red and pink hat; he carries a scroll. The both stand against gesso grounds. With the exception of panels Nos. v, vi, vii, viii, in which the backgrounds are of patterned brocade all the panels are of gesso.

At Worstead the screen is continued beyond the east wall of the nave to form chapels. The figure panels have been much repainted—the space below the dado rail is usually covered with gesso, and above it is dark blue or black, this is almost certainly later over-paint. This screen shows a very lavish use of gold (cf. Aylsham), all the backgrounds are gilt except in the case of St. Peter, when the ground is red and almost completely covered with a very beautiful brocade pattern of birds. The flower paintings on the mouldings are very rich and

attractive, and the usual black and gold "lurber's pole" is here varied by the introduction of a pattern on the black part. The panels represent:—

Vir Doloris, Christ wearing the Crown of Thorns and with His hands bound.

St. Paul, dark green robe, carrying a scroll.

Both these panels have been completely repainted.

St. James the Less, a red mantle on a gold ground.

St. Philip, a green mantle over a red gown, carrying a basket.

St. Simon, red gown and brown mantle, gesso ground.

St. Jude, red mantle, lined gold, carrying a boat.

St. Matthias, red gown and green mantle.

St. John, red gown and mantle.

In the last two panels the gesso ground is more raised than in the previous examples.

South:

St. Andrew, red mantle, cross saltire, gesso ground.

St. Peter, beautiful red background, the only exception.

St. James, red mantle lined green and white, carrying a hat, staff, bag and a cockleshell. His face is very expressive.

St. Augustine, Bishop's crozier, green mantle.

St. Bartholomew, green mantle, lined gold, carrying a knife.

St. Jerome, red mantle, cross and book.

St. William of Norwich, green mantle, carrying a red book and nails and wearing a crown of thorns.

A Crucifixion in which the figure is curiously robed with a mantle and crown (St. Ancumber?).

We may presume that the figures on the screen at Worstead equalled in beauty the panels of SS. James and Peter, and if that were so, the screen must have been very beautiful.

TRUNCH AND SALLE

The church at Trunch possesses a very fine painted font cover, and a screen dated 1502. The inscription, partly defaced, runs "Orate pro animabus omnium beneficiorum istius operis quod factum fecit, anno Domini millesimo quingentesimo secundo quorum animabus propitetur Deus. Cuius sit gloria, laus, honor, virtus et potestas atque jubilato gratiarum actio amor, indificiens per infinita saeculorum secula. Amen decant omnia." (cf. Revelation vii, 12.)

This screen, like others in the neighbourhood, has been very badly defaced. Above the dado rail, which has a painted gold pattern, the colour has in nearly every case been removed. The apostles follow the usual counterchange rule, for instance:—

St. Thomas stands against a red ground, and wears a green mantle over a gold brocade gown.

St. Philip against a green ground wears a red mantle over a gold brocade gown.

All the figures wear golden robes, some have rich brocade patterns; gold is used lavishly on this screen, in the dado band, nimbus and gowns, in the mouldings and wainscot rail, where the inscription, grapes and vines are gilded and raised in front of a red ground. The panels represent:

- St. Thomas with a spear.
- St. Philip with loaves.
- St. James the Less with fuller's club and hook.
- St. Matthew.
- St. James with a shell.
- St. Peter with keys and book.
- St. Paul with sword.
- St. Andrew with cross saltire.
- St. John with chalice and palm.
- St. Jude, a boat.
- St. Simon, a fish.
- St. Bartholomew, a flaying knife and book.

The figures have been badly mutilated, especially on the north side; on the south side the nimbi are more elaborate, but the diaper patterns are very coarse. In almost every case the buttresses have been destroyed; these should be compared with Ludham, as also the Benefactor's scroll.

The faces of SS. John and Jude still remain, and have fine patient expressions, neither so archaic as the earlier Cawston panels, nor so mobile as the later. For the fringe and the tracery compare Marsham, and the pattern on the robes compare Aylsham.

The screen at Salle has been almost completely defaced. It followed the usual rule of counterchange, but there was no dado rail, and the backgrounds alternately red or green were covered with a gold diaper. The tracery is exceedingly rich and delicate, and the buttresses and mouldings were covered with the usual floral ornament.

N. TUDDENHAM, WALPOLE ST. PETER, WIGGENHALL ST. MARY

At North Tuddenham there are fragments of a painted screen, but only the wainscot remains. Originally there were twelve painted bays and the doors, but of these only eight remain.

North side:

- St. Agnes in a blue mantle over a brown gown and carrying a purse. Background red.
- A Bishop with crozier, wearing a crimson cloak.
- St. Dorothy wearing a peculiar wimple, and carrying the usual basket and bunch of flowers. She wears a dark green mantle and a red gown. Background red.
- St. Herbert (?) with a hawk on his wrist. He wears a dark gown which was probably red.

The backgrounds have all been repainted, and probably the nimbus. There is no sign of floral diapers nor floral patterns on the mouldings, which are merely painted with the usual "wavy ribbon," and "barber's-pole."

On the south are represented SS. Catherine, Sebastian,



WALPOLE ST. PETER

and another female saint, and St. Roch. The figures are rather crude and lack subtlety and perhaps the SS. Roch, and Sebastian are the most fortunate. The tracery is coarse.

In front of the western tower there are four panels built into a screen. They represent SS. Gregory and Augustine, to the north; SS. Matthew and Mark to the south. These figures are so much covered with varnish that it is difficult to distinguish the figures. They have the more usual counterchange of colour above a gold dado band, and have small gold diaper patterns on the background. The evangelists are youthful angels with golden wings, whilst the doctors are more mature. This screen must have been interesting, with a nice balance of colour—only these panels remain, and there are no mouldings.

At Walpole St. Peter there is a screen belonging to this group. The figures represented are: St. Catherine and the Virgin and Child, St. Margaret, then six apostles, St. Gudule,* St. Dorothy and St. Barbara. Here we must notice the prominence of virgin saints, and the presence of St. Gudule suggests a Flemish donor. The screen as it now

* Mr. Montague James suggests St. Mary Magdalene instead of the St. Gudule (the patron saint of Brussels) suggested by Professor Constable.



LODDON

stands is probably the combination of two screens. The Apostles with the angular and arbitrary folds of their robes, their harshly and forcibly modelled heads, their wiry hair and beards, and the tiled floors on which they stand, suggest the earlier panels at Cawston. The female

saints stand on pedestals (cf. North Burlingham), their drapery hangs in straight folds, and their faces are dull and flat. These figures are very unsatisfactory.

In the screen at Wiggenhall St. Mary the virgin saints are prominent, and it is related with Walpole St. Peter. But the figures are more realistic in type and attitude and more fully modelled, and are placed against a background of a wall of grey brick running the length of the screen with blue sky above. This touch of naturalism relates the screen with some examples to the south of Norwich, as at Talcolneston and Loddon.

The figures represented are:—

St. Mary Magdalene.
St. Dorothy.
St. Margaret.
St. Monica.
St. Catharine.
St. Barbara.
The Virgin and Child
St. John the Baptist.

We have now traced the development of the screen, and of painting in England until the Reformation, and studied the peculiar efflorescence in East Anglia at the end of the fifteenth century. Professor Constable suggests that the designs show the influence of sculpture, as at North Burlingham, of German and Flemish engravings as in the screens of Talcolneston and Loddon, and that in the general arrangement there is an affinity with works of such masters as the S. Bartholomew altar-piece in the placing of the figures before a brocaded cloth. There are 165 painted screens in Norfolk, and of these we have considered the more important, a mere twenty-eight. The art displayed may be provincial, but it is by no means primitive, for it shows a fitness for purpose worthy of all our admiration; we are surprised and excited by the high quality of the work, by the decorative treatment of the frame, the consummate artistry of the gowns, the charming figures of the saints and angels; but never do they compel attention—these Norfolk screens are the supreme examples of decoration intelligently used, of painting as a handmaid to architecture.

APPENDIX

AN INDEX OF PAINTED SCREENS.

In Norfolk there remain 165 painted screens, of which 104 are painted with figures, and 64 merely decorated.

In Devonshire there remain 75 painted screens, of which 33 are painted with figures, and 42 are decorated.

In Suffolk there remain 53 painted screens, of which 21 are painted with figures, and 32 are decorated.

Of the other counties of England, there are 20 in Cornwall, 19 in Bedfordshire and Cambridgeshire, 18 in Northamptonshire, 14 in Lincolnshire, and 10 in Oxfordshire.

EXAMPLES IN NORFOLK OF WHICH THE DATE IS KNOWN.

S. John Maddermarket, Norwich 1451 Date known from inscription on screen and documents (4 panels in V. and A. Museum)

Burnham Norton	1458	Inscription
Poringland	1473	Documents
Cawston (earlier panels) after	1490	Documents
Ludham	1493	Inscription
Trunch	1502	Inscription
Cawston (later panels)	1504	Documents
Aylsham	1507	Inscription
Tacolneston	1509	Subject of panel and documents
Worstead	1512	Inscription
Fritton	1510-20	Documents
Edgefield	1526	Inscription
North Burlingham	1528	Inscription

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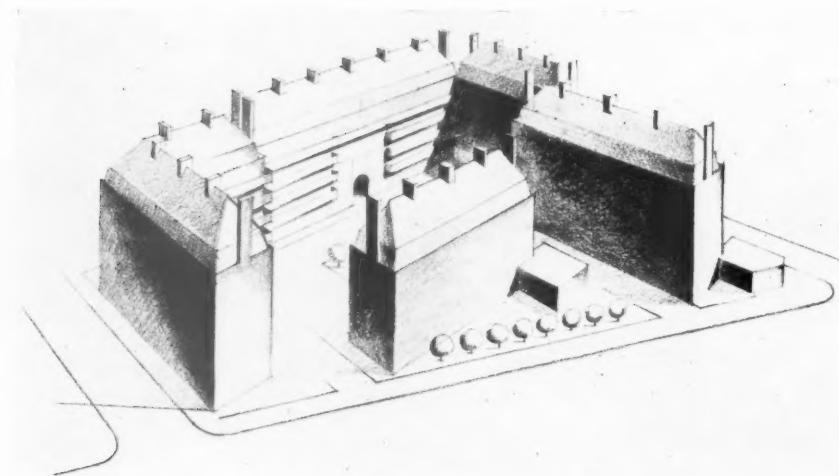
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Perspective drawing showing the massing of the complete scheme. The isolated block in the centre of the south side is five storeys high; the others are of six storeys.

TENEMENTS, WILCOVE PLACE, ST. MARYLEBONE, N.W.1

Architect : *Louis de Soissons, O.B.E. [F.], S.A.D.G.*

This scheme is of interest as an example of good quality rehousing on a cleared island area. Only about half of the houses had been scheduled for demolition, but nevertheless the whole site has been cleared. The difficulties of organising this scheme illustrate clearly the irregular working of the 1930 Act. It would have been impossible to replan the area, leaving a few isolated houses of mediocre quality; the owners, the St. Marylebone Housing Association, chose therefore to demolish houses which would not have qualified for the subsidy, in order to create an efficient scheme. The practice of regarding slum-clearance as a problem of houses instead of as a problem of areas results in endless difficulties and limitations and is, moreover, contrary to the principles of good town planning.

THE SITE, COSTS AND RENTS

The site, which is close to Lisson Grove, is bounded by four streets. It is being cleared in three stages, the first part being now complete and occupied, and the second under construction. The scheme will rehouse all the existing tenants and provide a few extra flats. There are five blocks, linked together, of six storeys each and one block, on the south side, of five storeys. The two highest floors in all blocks are maisonettes having bedrooms in the mansard roofs.

The complete scheme is planned to contain 137 flats and 3 shops on a net site area of 1.05 acres. The total number of rooms is 414, counting the 3 shops equal to 7 rooms. The buildings occupy 38 per cent. of the net site area, equivalent to 133.33 flats per acre. There are 19 flats with one bedroom, 106 with two, 9 with three and 3 with four.

The total cost will be £75,000, which is 1s. 2½d. per foot cube exclusive of site work, and 1s. 3½d. inclusive of site work. The following average costs are exclusive of site work: Per room, £132 6s. 11d.; per flat, £391 7s. 3½d.; per 2-room flat, £264 13s. 10d.; per 3-room flat, £397 os. 9d.; per 4-room flat, £529 7s. 8d.

The St. Marylebone Housing Association will operate in this scheme a system of rent rebates. This system takes into account a number of factors of which the two major are family income and size. The average rent per room is 4s. 6d., the rent of a 3-room flat varying from 11s. 6d. to 14s. The rents are approximately the same as those previously paid by the tenants in the slum houses.

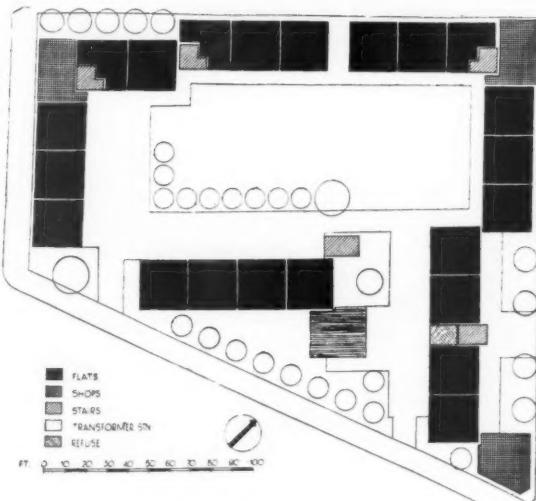
STRUCTURE AND EQUIPMENT

The scheme represents an attempt to provide something superior to the minimum tenement; it is the aim of the Association to provide a dwelling in which the tenant

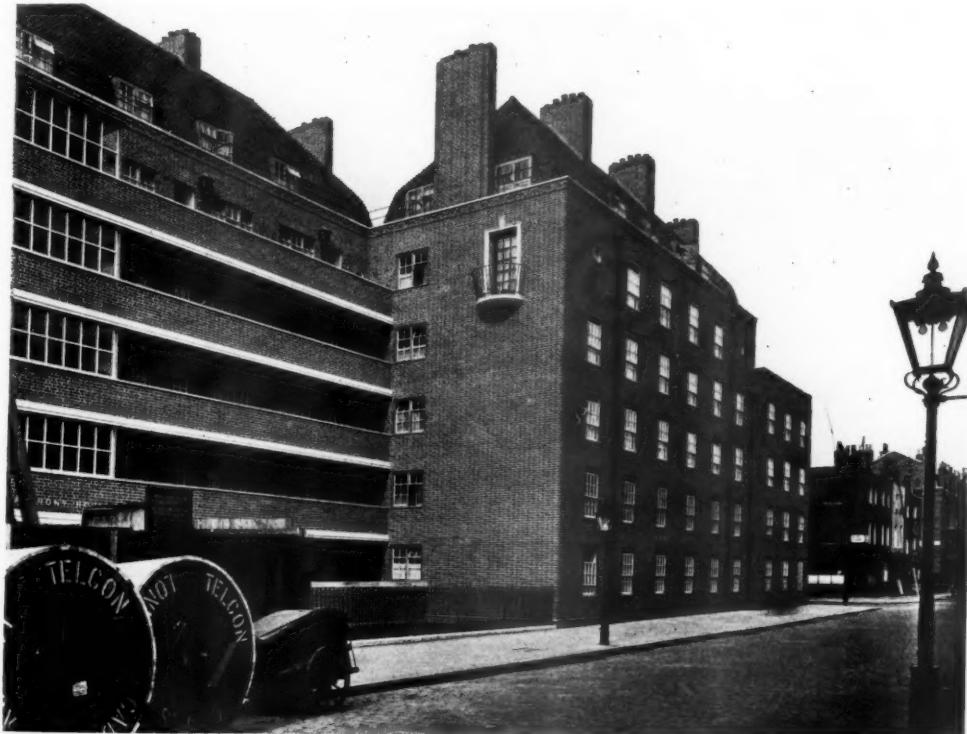
will take a pride. The exterior is faced with hand-made sand-faced multi-colour bricks and the roof is covered with similar plain tiles; windows are wooden double-hung sashes and casements. The kitchens are equipped with built-in furniture (see drawing on page 1020) and have tiled walls. The living-room fireplaces are "Inter-oven" with open fire and oven, the cookers are electric and electric coppers supply the baths; power points are provided in all rooms. The floors of the balconies, stairs, passages, kitchens and bathrooms are of granolithic paving; those of the bedrooms and living rooms are of boards.

In order to help the tenants to acquire the additional furniture necessary for their enlarged quarters, the Association provides new furniture which can be bought on a deferred payment system. This reduces the risk of the introduction of vermin in second-hand furniture after that of the tenant has been disinfected.

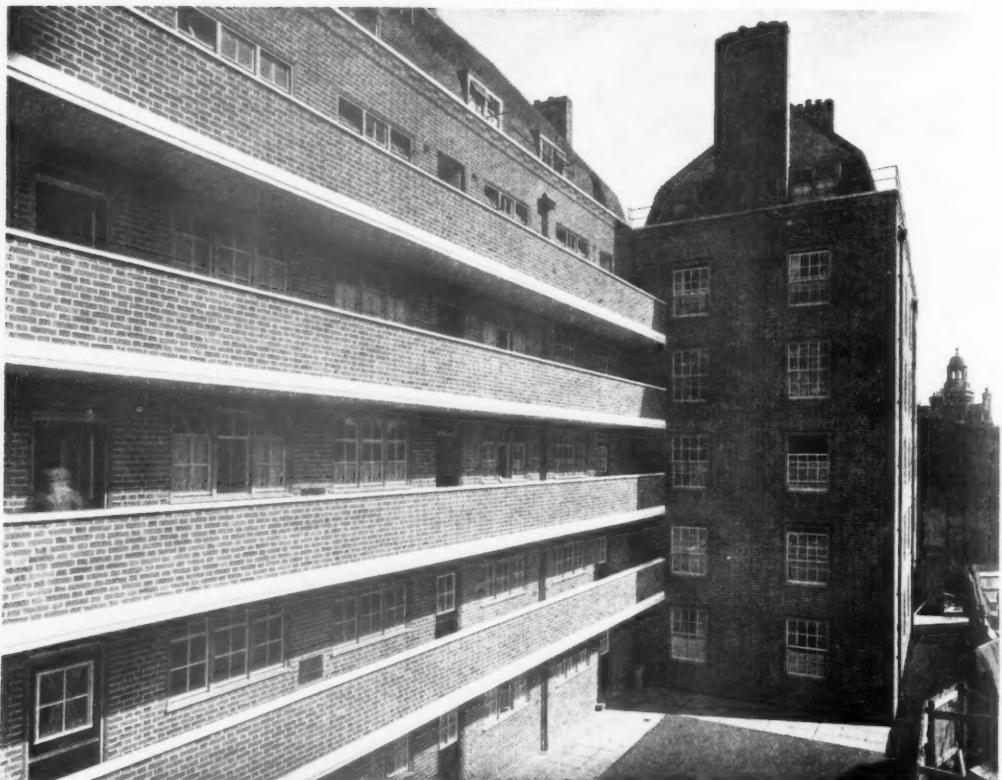
The structure consists of solid brick walls, 18 inches thick on the ground floor and 14 inches thick on the upper floors. The party walls at the sides of the stacks (see plans) are of 9 inch brickwork on the ground with $\frac{4}{5}$ inch brickwork on upper floors. The structural



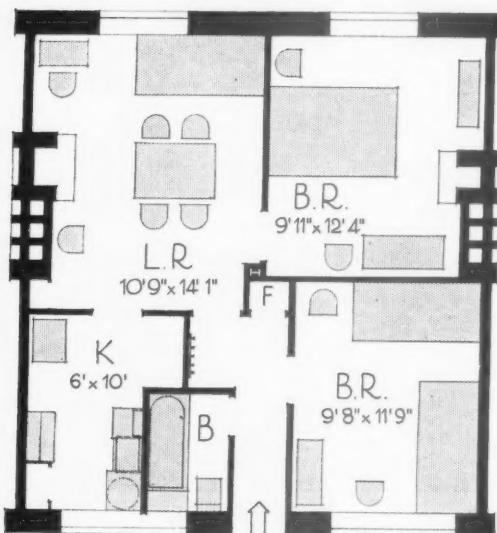
Site plan of the complete scheme.



The east side of the completed section. Trees are to be planted in front of the balconied portion.



Above is a view of the eastern side of the completed portion. Below is a typical three-roomed flat. A central stanchion carries beams, spanning from the chimney breasts, which support a concrete and filler joist floor.



floors are of concrete and filler joist, supported at mid-span by a central line of beams and a single stanchion. The steelwork is not continuous, but is arranged as units, one to each flat; this helps to reduce noise transference. Each steel member is light enough to be man-handled into position. The partitions are of breeze concrete slabs.

SANITATION

The drainage is on the "one-pipe" system in cast-iron; this is made possible by the grouping of kitchens and bathrooms in vertical units. In one of the groups already built an experiment has been made with "one-stack" drainage. This consists of a single 4 inch copper pipe, acting as both soil and vent into which all fittings discharge through deep-seal traps; all joints and connections are welded. The Local Authority sanctioned the experiment with a view to its possible adoption in the remainder of the scheme. A small secondary pipe was installed which could be coupled up to act as a vent pipe in case the "one-stack" system was not considered

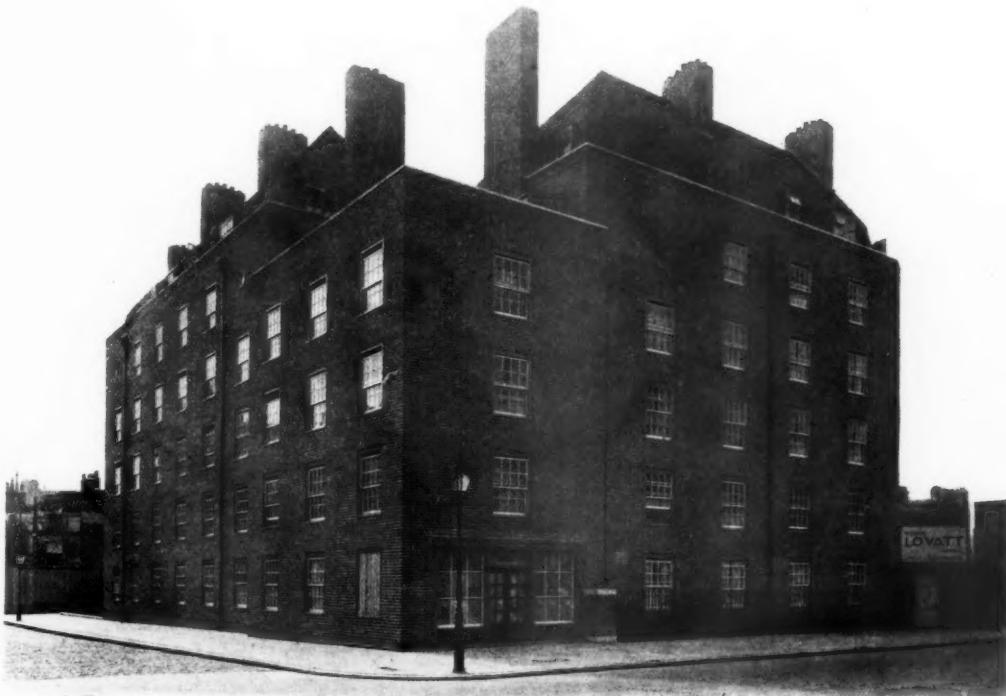
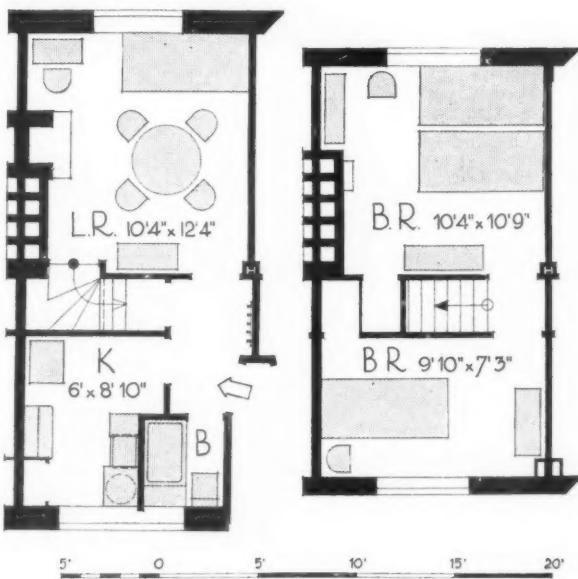
successful. The stack was, however, subsequently tested and passed so that anti-siphonage pipes will not be required for the rest of the scheme. All drainage is inside the structure, thereby avoiding the usual mass of pipes disfiguring the elevations and restricting the balconies.

The system of refuse chutes has been arranged to meet the "container" disposal system operated by the St. Marylebone Borough Council. The unit consists of a covered steel box on wheels, which is placed under the mouth of the chute in a closed compartment. It is removed daily on a specially designed lorry, emptied, washed, and disinfected. The handling of refuse in the open air, offensive and dangerous on windy days, is entirely avoided.

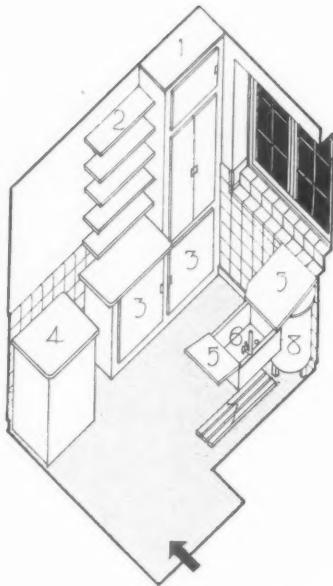
AMENITIES

The architect considered fully the insulation of the whole scheme. The placing of a lower block on the south side ensures good penetration of sunlight into the

Below is a view of the north-east corner showing one of the three shops. On the right are plans of a typical maisonette; the bedroom floor is in the mansard roof.



A Kitchen. Key: 1, Larder; 2, Shelves; 3, Cupboard; 4, Electric Cooker; 5, Draining Board; 6, Sink; 7, Slatted Shelf; 8, Electric Copper. The drawing is of a kitchen in the first block built; in the remainder it has been found possible to extend the wall tiling to the full room height. A plate rack over the sink is omitted for clearness.



The back of a block of slum dwellings not yet demolished. This is typical of the site. It is worth noting that the tenants pay approximately the same rents in the new flats as they did in the slum houses.

central courtyard. He also thought it desirable that the planting should not be confined to the central courtyard but that the trees should be brought to the street fronts. The blocks were accordingly set back to allow the provision of a small area of grass and trees on each of the four streets.

It should be noted that the scheme is self-supporting. The St. Marylebone Housing Association pay 3 per cent. on their ordinary shares and 2½ per cent. on their loan stock.

CONTRACTORS AND SUPPLIERS

GENERAL CONTRACTORS: Wilson Lovatt and Sons, Ltd.

STRUCTURE: Steelwork, Fleming Brothers. Facing bricks, Daneshill Brick and Tile Co. Roof tiling, floor, wall and fireplace tiles, Roberts Adlard and Co. Portland stone, F. J. Barnes, Ltd.

STRUCTURAL FINISH AND EQUIPMENT: Asphalt, Permanite, Ltd. Ironwork, Eric Munday, Ltd. Plumbing, Matthew Hall and Co., Ltd. Cement glaze, Hoyle, Robson and Barnett Ltd. Glazing, A. Higginbotham and Sons. Painting, A. Bagnall and Sons. Dust containers, Shelvoke and Drewry, Ltd. Plastering, William J. Wheeler and Son. Grates, Welwyn Stores (1929), Ltd. Special paint on Concrete balcony soffits, Silexine Decorators, Ltd.

Review of Construction and Materials

This series is compiled from all sources contributing technical information of use to architects. These sources are principally the many research bodies, both official and industrial, individual experts and the R.I.B.A. Science Standing Committee. Every effort is made to ensure that the information given shall be as accurate and authoritative as possible. Questions are invited from readers on matters covered by this section; they should be addressed to the Technical Editor.

The following are addresses and telephone numbers which are likely to be of use to those members seeking technical information. There are many other bodies dealing with specialised branches of research whose addresses can be obtained from the Technical Editor. We would remind readers that these bodies exist for the service of Architects and the Building Industry and are always pleased to answer enquiries.

The Director, The Building Research Station, Garston, Nr. Watford, Herts. Telegrams: "Research Phone Watford." Office hours, 9.30 to 5.30. Saturdays 9 to 12.30.

The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks. Telephone: Princes Risborough 101. Telegrams: "Timberlab Princes Risborough." Office hours, 9.15 to 5.30. Saturdays 9.15 to 12.

The Director, The British Standards Institution, 28 Victoria Street, London, S.W.1. Telephone: Victoria 3127 and 3128. Telegrams: "Standards Sowest London." Office hours, 9.30 to 5. Saturdays 9.30 to 12.30.

The Technical Manager, The Building Centre Ltd., 158, New Bond Street, London, W.1. Telephone: Regent 2701, 2705. Office hours, 10 to 6. Saturdays 10 to 1.

THE STRENGTH OF BRICKWORK

For some years the Building Research Station have been engaged on a lengthy and necessarily laborious series of tests on the strengths of bricks, brick walls and piers. In spite of the universal use of brick as a building material, exact knowledge of the load-bearing capacities of different makes of brick and of structural units built of them is almost non-existent. Before the recent publication of the Station's Report* on their tests the most recent data available were contained in a report published by the R.I.B.A. in 1905.

TESTING INDIVIDUAL BRICKS

Since no standard form of strength tests existed, it was first necessary to decide what kinds of results were required and then to devise means both of obtaining these results and of relating them to one another. In testing the individual brick it was thought desirable to test the brick as a *unit* rather than to find out the strength of the *material*. It was therefore necessary to ensure that the influence of the frog, where there was one, should not be modified or eliminated. Difficulties were experienced in obtaining a uniform bedding mortar, so the individual bricks were tested between sheets of three-ply wood, the frogs being filled with a normal 1:3 Portland cement mortar.

It was found that the compressive strengths of samples of the same brick varied between limits as wide as plus and minus 50 per cent. Difficulties were also experienced in obtaining samples that were really representative. It was therefore necessary to test large quantities in order to arrive at reliable averages.

Tests were carried out in eight ways using different mortars for filling the frogs, different setting times for the mortars, in the form of half bricks, as brick on edge, with the bricks wet and dry. The tests were compression, transverse and shear.

The results are presented in an elaborate table giving for each make the stresses obtained in the different tests and the percentage variations of the batches. These results appear to

confirm existing ideas of strengths of different makes, the pressed blue bricks having the higher figures, the stocks and hand-mades having the lower. The method of manufacture, apart from hand-moulding, appears to have little relation to the strength. In one case a wire-cut blue is considerably stronger than a pressed blue by the same makers. Some of the brown and red wire-cuts are well up to the blue class.

The variability of makes is shown in an interesting table in which they are placed in order. Again the mechanically made bricks show greater uniformity than the hand-made, the list being headed with a fletton, blue wire-cut and sand-lime. The stocks are the lowest, which is doubtless due to some extent to their irregular shape.

TESTING PIERS AND WALLS

The general size of piers was conditioned by the testing machine; those generally used were 18 inches square and 8 feet high, built in English bond under identical conditions. This part of the tests, of more practical value than the tests of individual bricks, forms the main part of the report. The table, in which the different makes as tested in piers are placed in order, is of outstanding interest and deserves close study. At the top, as would be expected, is the Blue Staffordshire Pressed at 3,180 lb. per square inch. Next are the Cattybrook Best Blue Wire Cut, the Tunbridge Wells Wire Cut, the Cattybrook Best Blue Pressed, the Accrington Ordinary Red Pressed, and the Southwater Pressed, ranging from 2,840 to 2,180 lb. per square inch. Again the makes, rather than the methods of manufacture, show variation. Phorpres Flettons are 1,465, while some other Flettons are as low as 877 and 842. Sand-lime bricks vary between 1,750 and 967, Stocks from 1,385 to 803.

It seems to be difficult to establish the relations between the strengths of individual bricks and of piers built of them. It would appear that the ultimate strength of a pier is from about one quarter to one third of the compressive strength of a brick tested flat; for stronger bricks the ratio is as low as one-fifth. This relation is far from being precise.

* Building Research Special Report No. 22. Mechanical Properties of Bricks and Brick Masonry. H.M. Stationery Office. 1s. 3d.

THE INFLUENCE OF MORTAR STRENGTH

It is generally believed that strong mortars add materially to the strength of brickwork. This belief is not borne out by the tests. The following figures are extracted from a table summarising researches into this question. Pier No. 13 of Flettons, built in 1:2 cement mortar, with a crushing strength of 4,000 lb. per square inch, showed a crushing stress of 1,130 lb. per square inch. Pier No. 14 of Flettons, built in 1:4 cement mortar with a crushing strength of 1,920 lb. per square inch, showed a crushing stress of 1,035 lb. per square inch. That is to say, doubling the strength of the mortar resulted in a 10 per cent. increase in pier strength only.

The relative strengths of lime mortars and cement mortars is shown in the same table. Pier No. 17, of Flettons, built in 1:3 lime mortar, showed a crushing stress of 492 lb. per square inch as against Pier No. 12, of Flettons, built in 1:3 cement mortar, which showed a crushing stress of 1,070 lb. per square inch. The age of the lime mortar pier was 90 days, and of the cement mortar pier, 28 days.

SLATES

The necessity for establishing tests that will enable natural building products to be graded is an outcome of modern conditions. When natural materials had only local use, the knowledge of their properties was common to craftsmen in the locality of use. Nowadays, when transport will bring to any one given place an enormous range of building materials, the craftsman cannot be expected to be acquainted with all of them; hence the necessity for universally applicable methods of test leading to British Standard Specifications.

With this end in view the Building Research Station have issued a bulletin on roofing slates,* in which are summarised the Station's investigations into the properties of typical slates, the processes of weathering to which they are subjected and a description of tests that can be applied in order to determine their resistance to decay.

The bulletin begins with a brief geological note on the origins and nature of slates and then proceeds to discuss weathering and causes of deterioration. Apart from mechanical wear or damage the destructive agents can be classified as (a) Physical and (b) Chemical. Physical attack is principally water action, which is governed by the rate at which the slate will absorb moisture and the amount it will hold. This moisture absorption will determine the effect of frost and also of differential movements caused by wetting and drying.

Chemical attack is mainly that by sulphur dioxide from the burning of coal, of which appreciable amounts may be present in the air in country districts. In industrial areas other acid gases may be present and these usually cause rapid decay. These acids chiefly attack the calcium carbonate in the slate. Generally speaking, the attack by water results in cracking and flaking, whereas chemical attack causes softness and powdering, though it may also cause lamination.

The traditional methods of ascertaining the soundness of slates are next discussed. While these are of use to the expert having knowledge of the particular kind he is handling, they are of little use when he is dealing with a kind unfamiliar to him and they are almost useless to the non-expert. Their inclusion in specifications is almost always valueless.

The influence of bond on strength of piers and walls was not investigated at the Station, but the Report contains evidence from other sources. This evidence is not conclusive, though it appears that laying the bricks so that their transverse strength is increased will tend to improve the strength of the pier or wall. Laying them on edge would effect this.

OTHER PROPERTIES

The load-bearing capacity of a brick is by no means the only property that determines its use. The Report contains in an appendix the results of other physical tests including absorption, wear and freezing. A table of weights of brickwork is also given, showing for different makes the weights of individual bricks, of mass brickwork, $4\frac{1}{2}$ inch and 9 inch walls.

A comparison of the ascertained strengths of piers, with the values permissible under the L.C.C. Code of Practice for the Use of Structural Steel, shows that in the worst case the factor of safety is somewhat greater than five.

It appears that none but full laboratory tests will determine with precision the qualities of a slate so that an estimate of its life can be made. This infers some sort of guarantee, either in the form of regular selection and test of batches from a quarry, with a report by an independent authority which can be shown the purchaser, or the establishment of a British Standard Specification, with the usual producer's guarantee that the slates are in accordance with the standard.

Five physical tests and three chemical tests are described. These have been devised and used by the Station and the results obtained are found to agree generally with experience. The tests are in the nature of accelerated weathering, shortening to a few months the physical and chemical actions which may take many years in a slate exposed on a roof.

It appears that water absorption affords some indication of quality. The better class slates were found to absorb less than 0.2 per cent. by weight of moisture, whereas inferior slates absorbed at least 0.3 per cent. Physical and mechanical tests did not produce much indication of weathering qualities. The process of repeated wetting and drying produces effects which, in general, give good indications of relative durability. The best indications were those obtained from tests in acid solutions. This test consists in immersing specimens measuring 2 inches square and prepared with honed edges, in acids of two concentrations, namely, 20 and 40 per cent. The slates are left in the acids for 10 days and then washed in water and allowed to dry. The tests require careful carrying out or the results will be inaccurate. It is found that the effects on the slate are similar to those obtained by normal weathering and the results agree closely with observations made on naturally weathered slate roofs. Very good slates will resist acids of both strengths, while the poorest slates are attacked even in the weaker solution.

These tests will allow grading according to probable weather resistance. We understand that a Committee of the British Standards Institution is at present preparing a Standard Specification for Slates on the basis of this bulletin.

* Building Research Bulletin No. 12. The Durability of Slates for Roofing. H.M. Stationery Office. 4d.

AIR CONDITIONING IN HAMPTON COURT ORANGERY

The question whether it is necessary or desirable to install air-conditioning and humidity control in picture galleries and museums has received a valuable contribution from the researches made in connection with the recently-installed plant at Hampton Court Orangery.

Wren's Orangery at Hampton Court contains the famous Mancina cartoons purchased by Charles I. These cartoons, which are of tempera on canvas, have recently been reconditioned by Mr. S. Kennedy North, who has encased the canvases completely in a transparent film of paraffin wax; they are hung unglazed.

We have received from Mr. J. MacIntyre, O.B.E., B.Sc., M.Inst.C.E., Senior Engineer to H.M. Office of Works, an article describing the installation, for the design of which he was responsible.

It was found that during the winter the temperature in the Orangery could be fairly easily maintained at 55 degrees to 60 degrees Fahr., by the existing system of artificial heating from underfloor hot-water pipes. In summer, however, 80 degrees Fahr. was reached in spite of the use of sunblinds. The interior relative humidity varied from 35 to 90 per cent. during the period when records were taken. From tests made elsewhere, it appeared that protection by a wax coating would render unnecessary the installation of a full air-conditioning plant. It was therefore decided to take steps only to ensure that the variation in water content should not be such as to create a range of more than 20 per cent. in relative humidity, that is, between 55 and 75 per cent. This could have been achieved by the installation of a refrigerating plant but a simpler and cheaper apparatus was desired.

A small air-conditioning plant room was built in one end of the Orangery, and an arrangement of doors to form an air-lock entrance at the other. The plant consisted of the usual fan, spray humidifier and auxiliary heater and a drying screen chamber. For the absorbing material, old canvas hose was selected, partly because it was cheap to obtain and partly because it was found to be as effective as any other textile.

The air is extracted from the building along a trench under the windows and returns through grated openings in the front seats under the windows. The seats contain additional canvas for absorbing the moisture.

Two hygrometers are fitted in the building, one taking charge of the lower limit of relative humidity, and one of the upper limit. The lower sets in operation the circulating fan and water sprays, thus introducing water into the circulated air. The upper operates the fan only, drawing the air through the canvas. A thermostat switches on the auxiliary heater and fan when the heat from the underfloor pipes is insufficient to maintain the temperature above 54 degrees Fahr.

Recording thermometers and hygrometers are also provided, both inside and outside the building, so that the attendant can observe weather conditions and make use of suitable occasions for drying out the canvas by means of the fan, after the sprays have been in action.

This plant for controlling humidity in a picture gallery is of great interest because it may well be the forerunner of others.

ABATTOIR DESIGN

A Report* on the Design of Abattoirs has been produced by a technical committee of the Ministry of Agriculture and Fisheries, which is the most recent and authoritative publication on the subject. A full review of the Report will be published shortly in the JOURNAL.

WATER WASTE

Members practising in London should note that the Metropolitan Water Board have issued new bye-laws aimed at preventing waste of water. These are not temporary restrictions following on the drought but a revision of permanent regulations. They can be obtained from the Clerk to the Board, 173 Rosebery Avenue, E.C.1, price 1s. 6d.

CONTENTS OF PRECEDING NUMBERS

November 11th.—*Progress in Research, Bricks, Building Stones, Steel, Reinforced Concrete, Timber, B.R.S. Annual Report, Research and slum clearance, Equipment of buildings, Sliding glass doors.*

November 25th.—*Weathering of Portland stone, Traffic vibration, Lead pipes in clay, Copper dowels in lead and cement, Condensation, Overhead sliding door gear, Pipe pushing.*

December 9th.—*The formation of blisters on mastic asphalt roofs, Lifting of wall and floor tiles, Sliding glass doors, Fixing devices and plugs.*

* Abattoir Design. Economic Series No. 40. H.M. Stationery Office. 1s.

December 29th.—*Some notes on Door Springs, Floodlighting, Jointing drain pipes with neat cement, Dusting in Concrete Floors, Overhead Sliding Door Gear.*

January 13th.—*The St. Paul's Foundation Report, Bathing pool surrounds, Electric water heaters and the formation of scale.*

January 27th.—*The Report of the Reinforced Concrete Structures Committee, Some steel alloys recently introduced, The manhole cover, Tightening wires.*

February 10th.—*Paper in Building, The D.S.I.R. Annual Report, A Reinforced Concrete Handbook, Reinforced Concrete Practice.*

February 24th.—*Some notes on Standard Steel Windows, Plaster Failures.*

March 10th.—*Automatic Firing with Solid Fuel, Steel Windows, Swimming Bath Purification.*

March 24th.—*The Mopin System of Construction, Compulsory Sound Insulation, Steel Windows.*

April 14th.—*The Sand-Lime Brick, The Mopin System.*

April 28th.—*Rural Drainage, The Behaviour of Copper on Exposure to the Elements.*

May 19th.—*Moving Forms for Reinforced Concrete, The Cost of Hospitals, Public Baths and Wash-houses, Grading of Hardwoods, The Second Steel Structures Report.*

June 2nd.—*Copper Pipe Welding, Drying of Building, Sliding Glass Doors, Craigleath Stone.*

June 23rd.—*Paint Failures, Acoustics, The Action of Water on Lead, Derrick Cranes.*

July 7th.—*Modern Practice in Brickwork (special article), Vernon in Buildings and their Extermination (special article).*

July 21st.—*The Use of the British Standard Specification, High Tenements.*

August 11th.—*Steel and Steelwork, Temperature Rise in Hydrating Concrete.*

Book Reviews

CREATIVE DESIGN, by Joseph Cummings Chace. New York. John Wiley. London: Chapman and Hall. 1934. 15s. 6d.

This book is a curious re-echo of a past which we had every reason to hope had vanished into the limbo of happily forgotten things. The poker work school of art has had its day. At its best it was an offshoot of the art nouveau movement, and can hardly reappear to be taken seriously. The phase was odd enough in its own day, but is odder still when seriously presented in a text book by the head of a New York school of art, and fantastic when intermarried with an angular modernism. In England it still reappears in those friezes which the wallpaper makers turn out for nurseries—little Bo-peep and some prancing lambs all in a line. It had its hey-day on suède covers to art editions of Ella Wheeler Wilcox and display cards in the least advanced shops, but, on the whole, stopped there. None of the designs in this book would pass muster in any school of art in England, and the method of teaching by design aphorisms has passed with the designs that method produced. "There are two kinds of design: that of two dimensions known as applied or decorative; and that of three dimensions, commonly called constructive . . ." Designs for limited areas . . . require the consideration of (a) a border, (b) the inclosed area . . . and (c) the lettering, if lettering is to be included in the design. The border may be made up of abstract forms or forms conventionalised from Nature . . . and so on. All this might be useful if the examples by which such instruction is illustrated were good. Unfortunately, the examples are so poor that the value of the instruction is entirely lost.

SOME NOTES ON THREE EARLY DOCUMENTS RELATING TO MASONS, by Douglas Knoop, M.A., and G. P. Jones, reprinted from the *Transactions of Quatuor Coronati Lodge*, Vol. XLIV. 1931. Pp. 223-235.

Professor Douglas Knoop and Mr. G. P. Jones, who published their authoritative work on the mediæval mason last year, are continuing their researches, of which this paper is a result, into various by-ways of building history. The notes refer to (1) a Vale Royal Abbey building contract of 1359; (2) the Sheriff of York's expenses taking masons, 1363; and (3) the wage list of York Minster masons, 1472.

The Notes on the Vale Royal contract, which form a sequence to the same authors' paper on the first three years of the building of Vale Royal Abbey, 1278-1280, refer to the works undertaken to complete the building. The significance of the contract is that it marks the change from building at Vale Royal by "direct labour" to a definite contract system; a change which was probably accelerated by the Black Death. The authors draw attention to three unusual features of the contract: first, that the mason-contractor was to select the masons, etc., and the abbot and convent were given powers to enlist the men by impressment. Secondly, the mason-contractor was to find all the iron and steel required to make and mend stone axes and "irons" for the masons, but for no other tools, the clearest statement with regard to responsibility for tools that the authors have yet met. Thirdly, in the event of building coming to a stop, or of the abbot or convent causing a loss to the contractor, compensation was to be determined by "good people" of the country and masons.

The second document throws an interesting side-light on the

life of the mediæval mason. It is an account relating to the dispatch of pressed masons from Yorkshire to Windsor in 1363, when William of Wykeham was in charge of the works there; it includes a list of the masons employed and the sheriff's account of expenses.

The last section of the paper relates to the fabric rolls of York Minster. Some of these rolls are in such a fragile condition that it is not possible even to examine them without risk of their complete disintegration. Messrs. Knoop and Jones have, however, translated as many of the entries as can be deciphered without risk to the documents. The rolls give the names of the masons and their wages.

This paper represents one small part of the invaluable research which these two indefatigable scholars are giving to the history of the mediæval mason, a work which we hope will ultimately result in the publication of another full work on the subject.

SOME EIGHTEENTH CENTURY BIRMINGHAM HOUSES AND THE MEN WHO LIVED IN THEM, by Benjamin Walker, F.S.A., A.R.I.B.A., reprinted from the *Transactions of the Birmingham Archaeological Society*, Vol. LVI. 1932. Oxford University Press. 1934.

It is characteristic of the present age that while we are waking up to the possibilities of a modern architecture and town planning which shall make our towns finer places for the future, we are becoming more balanced in our consideration of the beauties of the past. The chief feature of this new interest is that architectural merits are now given their proper share of research, and take their place alongside historical and archaeological considerations.

Mr. Walker's paper on Birmingham buildings is a good example of this. The houses he describes are relics of the modest bourgeois buildings of the eighteenth century, typical of almost every English town. Until comparatively recently scholars paid scant attention to them, deeming nothing later than the seventeenth century worthy of research. Now it is realised that not only are they sociologically interesting, but also architecturally interesting, and notable for their essentially civic qualities of reticence and uniformity. The growth of architectural sense in the world of scholars and archaeologists is balanced by a growth of historical sense in proper proportions among architects, who now more than ever are able to appreciate sociological influences in the formation of architectural style.

History, archaeology and architecture, all find a proper place in Mr. Walker's account of houses in Temple Row, Moor Street, Jennen's Row, Holloway Head, Newhall Street, Easy Row, Anderton Square, Whittall Street, Livery Street and Summer Lane. Each house is given a brief but admirably descriptive account of its architecture, all are illustrated by photographs and some by plans and architectural drawings, and the histories of the various owners, as far as they relate to the buildings, are recounted in sufficient detail to make each house take its proper place in the general story of civic life.

The paper is a model of its kind which could well be followed by others who have the requisite skill and time to research into the local history of their own towns.

NEW LISTS OF BRITISH STANDARD ANGLES AND T-BARS

DIMENSIONS AND PROPERTIES OF B.S. EQUAL ANGLES, UN-EQUAL ANGLES AND T-BARS FOR STRUCTURAL PURPOSES. (Revised April 1934.) British Standards Institution. London, 1934. 2s.

The British Standards Institution has recently issued a revised list of Equal Angles, Unequal Angles and T-Bars, which covers the sections in most common use at the present time.

The original lists, giving the dimensions, sectional areas, and weights, were first issued in 1903, and were followed in the next year by tables giving the moments of inertia and other geometrical properties of the sections. These were published in the Section Book, B.S.S. No. 6-1904, with similar details for bulb angles, bulb plates, channels, beams, T-bars and Z-bars.

A revision of these lists was undertaken shortly after the war and culminated in a reissue of the Section Book in 1924, the list of Z-bars, which were gradually falling into disuse, being omitted.

After a time, experience showed that a number of the original 1903 sections were still being called for, and accordingly the sections were again examined with a view of eliminating those for which it was found there was little demand, and incorporating such of the older sections as were still being used to any large extent. To enable this to be done the

steelmakers supplied the committee with particulars from their order books.

In the present lists there are, for each size of angle, two or more standard thicknesses at which the profile will be accurate, and these are printed in dark type. Other thicknesses can, however, be provided by the steel works by adjusting the rolls of the standard sections within the maximum and minimum thicknesses listed, and for the assistance of designers the properties of these in steps of $1/16$ in. (0.0625 in.) have been calculated and are printed in lighter type. This new feature should improve the usefulness of the Standard Lists. Sections so produced will, however, depart from the nominal size and be slightly imperfect in contour as indicated in the remarks printed at the end of each list.

The standard thicknesses were formerly listed in decimal equivalents of fortieths of an inch, but in the new standards they are in ordinary fractions, although still printed in decimals, and designers of structural steelwork will agree that this is an improvement from their point of view.

In order to prevent confusion with the sections previously published entirely new reference numbers have been allotted to the present standards.

The three lists are included in one publication, No. 4A-1934, which can be obtained from the offices of the British Standards Institution, price 2s. 2d., post free.

A. ALBAN H. SCOTT [F.]

Accessions to the Library

1933-1934-XIII

INCORPORATING NOTES ON RECENT PURCHASES

These Notes are published without prejudice to a further and more detailed criticism.

Lists of all books, pamphlets, drawings and photographs presented to, or purchased by, the Library are published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists for reference.

Books presented by Publisher or Author marked

R.

Books purchased marked

P.

*Books of which one copy at least is in the Loan Library.

ARCHITECTURE

YORK AND EAST YORK ARCHITECTURAL SOCIETY

Yearbook, 1933-34.

(Including: G. D. Harbom. History of the Society, 1882-1932.)

HISTORY

CLAPHAM (A. W.)

*English Romanesque architecture before the Conquest. 9 $\frac{1}{2}$ x 16 $\frac{1}{2}$ pp. Oxford: Clarendon Press, 1930. £1 1s. P.

HUSSEY (CHRISTOPHER)

*The Work of Sir Robert Lorimer.

40. 13". xvi + 111 pp. London: Country Life, 1931. £2 2s. P.

DRAWING

BRITISH STANDARDS INSTITUTION

B.S. engineering symbols and abbreviations. pam. 8 $\frac{1}{2}$ ". London, 1934. 3s. 6d. R.

REGISTRATION

GREAT BRITAIN: PARLIAMENT ACTS

Architects registration Act, 1934. [24 and 25 Geo. 5. Ch. 38.] leaflet 9 $\frac{1}{2}$ ". London: H.M.S.O. 1934. 1d. P

BUILDING TYPES

(CIVIL)

BRITISH STANDARDS INSTITUTION

No. 563. B.S. specification for land aerodrome and airway lighting. pam. 8 $\frac{1}{2}$ ". London, 1934. 2s. R.

AIKMAN (A. E.)

Design and construction in the repertory theatre. (R.I.B.A. Final Examination thesis.) fo. 15 $\frac{1}{2}$ ". typescript. 1934.

CENTRAL BUREAU OF HOSPITAL INFORMATION

Memoranda on matters of administrative interest to hospitals. pams. 40. London, 1929-.

Several memoranda are issued yearly.

KRANICH (FRIEDRICH)

Bühnentechnik der Gegenwart.

2 vols. 40. 11 $\frac{1}{4}$ ". Munich and Berlin: Oldenbourg, 1929-1933. £5. P.

(ECCLESIASTICAL)

SMITH (E. T. A.)

Essex brickwork (ecclesiastical). (R.I.B.A. Final Examination thesis.) 40. typescript. 1934. Presented by the author.

HOLBORN (I. B. H.)

An Introduction to the architecture of European religions. 7". Edinburgh: T. & T. Clark, 1909. 2s. P.

EELES (FRANCIS)

The Parish Church of St. Mary, Hendon.

2nd Edn. pam. 8 $\frac{1}{2}$ ". Hendon, 1931. 1s. P.

LANFRY (GEORGE)

La Cathédrale de Rouen au XI^e siècle. (Extrait de la Société des Amis des Monuments rouennais.)

40. pam. Rouen, 1931. Presented by the author.

726-54 (42-37)

BRYANT (T. H.)

*Suffolk. (County Churches, *series*.)
2 vols. 6½". London: G. Allen. 1912.
726-54 (42-52)

COX (J. CHARLES)

*Cornwall. (County Churches, *series*.)
6½". xi+256 pp. London: G. Allen. 1912. 2s. 6d. P.
726-54 (42-28)

COX (J. CHARLES)

*Isle of Wight. Its churches and religious houses. (County Churches, *series*.)
6½". xii+180 pp. London: G. Allen. 1911. 2s. 6d. P.
726-54 (42-52)

COX (J. CHARLES)

*Nottinghamshire. (County Churches, *series*.)
6½". xvii+251 pp. London: G. Allen. 1912. 2s. 6d. P.
726-54 (42-59)

COX (J. CHARLES)

*Cumberland and Westmorland. (County Churches, *series*.)
6½". xv+187 pp. London: G. Allen. 1913.
726-54 (42-61)

COX (J. CHARLES)

*Norfolk. (County Churches, *series*.)
2 vols. 6½". London: G. Allen. 1911.
726-54 (42-64)

EVELYN-WHITE (C. H.)

*Cambridgeshire and the Isle of Ely. (County Churches, *series*.)
6½". xlii+216 pp. London: G. Allen. 1911. 2s. 6d. P.
726-54 (42-21)

GRAYLING (FRANCIS)

*Kent. (County Churches *series*.)
2 vols. 6½". London: G. Allen. 1913.
726-54 (42)

MORRIS (J. E.)

*Surrey. (County Churches, *series*.)
6½". viii+200 pp. London: G. Allen. 1910. 2s. 6d. P.

DOMESTIC

UNSWIN (SIR RAYMOND)

The American housing corporation. *From The Listener*, 11 July, 1934.
40. pamph. 13". London: B.B.C. 1934. 3d. *Presented*.

MINISTRY OF HEALTH

Housing. Housing. A summary of the principal provisions of the Housing Acts and Public Health Acts in relation to the maintenance of dwelling-houses in a reasonably fit condition for human habitation. pamph. 9½". London: H.M.S.O. 1934. 2d. P.

MINISTRY OF HEALTH

Housing. Housing, England. The local authorities (Assisted Housing Schemes) amendment regulations 1934. Statutory rules and orders, 1934. No. 723. leaflet 9½". London: H.M.S.O. 1934. 1d. P.

MINISTRY OF HEALTH

Housing. Housing, England. The L.C.C. assisted housing scheme (losses by Metropolitan Borough Councils) amendment regulations. Statutory rules and orders, 1934. No. 724. leaflet 9½". London: H.M.S.O. 1934. 1d. P.

SMEETON (R. A.)

Modern domestic building in timber. (R.I.B.A. Final Examination thesis.) 40. 10". typescript. 1934. *Presented by the author*.

BARTELL (EDMUND)

Hints for picturesque improvements in ornamented cottages . . . including . . . the labourer and his cottage in three essays. 9½". vi.+130 pp. and 6 plates. London: Printed for J. Taylor, 1804. 3s. 6d. P.

DETAILS

PALLADIO (ANDREA)

Studio elementare degli ordini di architettura . . . pubblicato da Giovanni Battista Berti. 40. 11½". 55 pp. and 28 plates. Milan: Batelli e Fanfani. 1818. 10s. P.

ARCHAEOLOGY

ARCHAEOLOGICAL SURVEY OF CEYLON

Annual report for 1933.

LEARNED SOCIETIES

ARS QUATUOR CORONATORUM. VOL. XLIV. 1931. (1934)

Transactions of the Quatuor Coronati Lodge.

(Including: D. Knoop and G. P. Jones the first three years of the building of Vale Royal Abbey.

D. Knoop and G. P. Jones. Some notes on three early documents relating to masons.

H. Poole. "The Mediæval Mason" and the parish churches of England.)

EMPIRE FORESTRY JOURNAL. VOL. 13. NO. 1. 1934

(Including: H. N. Oliphant. Some aspects of timber production in Malaya.

H. A. Cox. Empire timbers in 1933.

C. C. Robertson. Some notes on the pines of Mexico (continued from vols. 11 and 12).

BUILDING SCIENCE

CONSTRUCTION

NEGUS (P. G.)

Floors, their construction and finish. (R.I.B.A. Final Examination thesis.) 40. 12½". typescript. 1934. *Presented by the author*.

BRITISH STANDARDS INSTITUTION

No. 556. B.S. specification for cement concrete cylindrical pipes and tubes (not reinforced). 10s. pamph. 8½". London. 1934. 2s. R.

TOWN AND COUNTRY PLANNING

LONDON COUNTY COUNCIL

Memorial for further Strand improvement. May 1906.

fo. 13 loose sheets. London. 1906. 5s. P.

GEERS (G. M. J.)

Town planning. Historical developments and modern systems. (R.I.B.A. Final Examination thesis.)

40. 12½". London. typescript. 1933. *Presented by the author*.

INTERNATIONAL HOUSING AND TOWN PLANNING BULLETIN. JULY 1934. NO. 34.

(Including H. Chapman. What is a Parkway? A Report on the Parkway and Parkway systems in the U.S.A.)

DRAWINGS

CHATTERTON (FREDERICK)

Horse Guards, London.

3 measured drawings by F. Chatterton, 1895.
Presented by bequest by Mr. F. Chatterton through Mrs. Chatterton.

Review of Periodicals

Within the self-imposed limit of these pages attempt is made in this review to refer to the more important articles in all the Journals received by the library. None of the journals mentioned are in the loan library, but the librarian will be pleased to give information about prices and where each journal can be obtained. Members can have photostat copies of particular articles made from journals in the library.

CIVIC BUILDINGS

BYGGE KUNST. Vol. 16. No. 7. July.
A new Court House at Bergen.

CHURCHES

BUILDER. Vol. CXLVII. No. 4775. 10 August.
Bishop Andrew's Church, St. Helier, Morden (Geddes Hylsop [A.J.]).

ARCHITECTURE ILLUSTRATED. August 1934.
St. Andrews' Presbyterian Church, Cheam, Surrey (Maxwell Ayrton [F.J.], red brick).

ARCHITECTS' JOURNAL. Vol. LXXX. No. 2064. 9 August.
Measured drawings and a photograph of St. Matthew Church, Windsor, N.S.W., built between 1810 and 1823 by Lachlan Macquarie, governor of N.S.W.

ASSEMBLY HALLS AND EXHIBITIONS

BAUGILDE. Vol. XVI. No. 15.
Competition designs for a vast assembly hall in Leipzig for the Nazis.

MONATSHEFTE F. BAUKUNST U. STADTEBAU. Vol. XVIII.
No. 8. August.
Competition designs for a vast exhibition and assembly hall with stadium for a sports congress in Hamburg.

MONATSHEFTE F. BAUKUNST U. STADTEBAU. Vol. XVIII.
No. 8. August.
The German Roads exhibition, Munich.

CHANTIERS. Vol. 2. No. 3. June.
Analysis of the construction of several designs in the competition for the Paris Palais des Expositions.

THEATRES AND CINEMAS

ARCHITECT AND BUILDING NEWS. Vol. CXXXIX. No. 3427.
24 August.
Shaftesbury Avenue News Theatre (R. Atkinson and A. F. B. Anderson [FF.J.]). Seats 202 persons in stalls and one balcony.

BYGGMASTAREN. 1934. No. 23. 25 July.
Long article on theatre design by Eskil Sundahl.

HOSPITALS, ETC.

ARCHITECTURE ILLUSTRATED. August 1934.
Brentwood District Hospital, Essex (Hugo R. Bird [F.J.]); 40 beds with possible extension to provide 100. Present building includes complete administrative and operating departments, etc.

ARCHITECT AND BUILDING NEWS. Vol. CXXXIX. No. 3425.
10 August.
The Kent and Sussex Hospital, Tunbridge Wells (Cecil Burns).

ARCHITETTURA. Vol. XIII. No. 1. July.
Competition designs for the Moderna Hospital and Clinic—a very large scheme for a complete local hospital service.

ARCHITECTS' JOURNAL. Vol. LXXX. No. 2065. 16 August.
The Eichholz Clinic, Great Portland Street, London (J. Emerton [F.J.]), the conversion of an office floor into a clinic with

waiting, rest and rooms for ultra violet and massage treatment, chiefly by blind masseurs.

JOHNSTON OF THE INSTITUTE OF JAPANESE ARCHITECTS.
Vol. XLVIII. No. 587. July.
Descriptions (in Japanese) and illustrations of the Kôraku Hospital and Laboratory of the Japanese foundation for Cancer Research, the Sanatorium of the Fukui Red Cross Hospital.

LABORATORY

ARCHITECTS' JOURNAL. Vol. LXXX. No. 2065. 16 August.
ARCHITECT AND BUILDING NEWS. Vol. CXXXIX. No. 3427.
24 August.
A research laboratory for the United Steel Companies, Ltd., Stockbridge (G. H. Shipley [L.J.]).

SHOPS

ARCHITECTS' JOURNAL. Vol. LXXX. No. 2066. 23 August.
Southport Co-operative Society's general offices and shop W. A. Johnson [F.J.].

SCHOOLS

DESIGN FOR TODAY. Vol. II. No. 17. September.
Planning for education, articles by W. B. Curry, headmaster of Dartington and Marcel Roux and W. T. Brown on a school by Lurcat at Villejuif.

ARCHITECTURAL RECORD. Vol. LXXVI. No. 2. August.
Vocational schools—illustrations of several good American examples.

LIBRARIES

LIBRARY ASSOCIATION RECORD. Vol. I, 4th Series. No. 8.
August.
A very thorough account of the Manchester Reference Library from the librarian's point of view, written by Charles Nowell, the librarian.

SWIMMING BATHS

ARKITEKTEN (COPENHAGEN). Vol. XXXVI. No. 5-6.
Swimming Baths—a series of long, fully illustrated articles dealing with baths in general and in particular with the Copenhagen-Idræts park bath (A. Wittmaack and V. Hvalspe), the Aarhus Municipal Baths (F. Draiby), Frederiksberg Baths (A. S. K. Lauritzen).

ARCHITECTURAL DESIGN AND CONSTRUCTION. Vol. IV.
No. 10. August.
Special articles on baths and swimming pools, illustrating many recent examples.

ARCHITECTURE ILLUSTRATED. July 1934.
The S.S. Brighton swimming stadium, West Street, Brighton (Jackson and Greenen [FF.J.]) and a swimming pool in the Cedars School, Leighton Buzzard (O. P. Milne [F.J.]).

CONSTRUCTION MODERNE. Vol. XLIX. 1045. 5 August.
Municipal baths (washing—not bathing), Rue Lapepide, Paris (M. H. Alaguillaume), very full details of design and construc-

tion; two floors of baths, 32 men, 32 women, with clothes rooms, etc.

ARCHITECT AND BUILDING NEWS. Vol. CXXXIX. No. 3426.
17 August.

Two private swimming pools by O. P. Milne [F.]

HOUSING AND DOMESTIC

JOURNAL OF THE ROYAL SANITARY INSTITUTE. Vol. LV.
No. 2. August.

Sir Hilton Young's speech to the Bristol Health Congress on the Housing question.

BUILDING. Vol. IX. No. 8. August.

Flats. An article by J. R. Leathart [F.] describing six recent London buildings and a short article by T. P. Bennett on Points in Planning, also a detailed description of Latymer Court, Hammersmith (Gordon Jeeves [F.]) and of a flat scheme in Brighton by Wells Coates and of the Lawn Road Flats, also by Wells Coates, and articles by H. I. Ashworth [A.], on the Small Flat, by G. W. C. Koyt, on the soundproof flat, with some useful constructional details, and on the Mopin system of construction, by E. A. A. Rowse [A.].

ARCHITECT AND BUILDING NEWS. Vol. CXXXIX. No. 3427.
24 August.

Short description, plans and photos of new flats at Wilcove Place, Marylebone. (L. de Soissons [F.]), for the Marylebone Housing Association.

ARCHITECT AND BUILDING NEWS. Vol. CXXXIX. No. 3425.
10 August.

BUILDING TIMES. Vol. IV. No. 9. August.

Illustrated account of the Lawn Road Flats (Wells Coates), a modern concrete building of single room service flats.

ARCHITECTS' JOURNAL. Vol. LXXX. No. 2066-7. 23 August.
Four blocks of bed sitting room flats. Little Orford Street, Chelsea. (Austin Blomfield [A.]).

Embassy Court, Brighton, a design. Flats by Wells Coates.

BUILDER. Vol. CXLVII. No. 4778. 31 August.

A large housing improvement scheme for the Borough of Hammersmith (G. E. S. Streatchfield, J. E. Franck, M. J. Dawson and B. Lisle [F. and A.]).

BAUFORMEN. Vol. XXXIII. No. 8. August.

BAUMEISTER. Vol. XXXII. No. 8. August.

As usual, these papers contain a number of good small houses

ALMSHOUSES

ARCHITECT AND BUILDING NEWS. Vol. CXXXIX. No. 3426.
12 August.

The Lucy Saunderson Homes, Galashiels (Mears and Carus Wilson [F.]). An almshouse village, corresponding to the English Whitely Village; 16 small houses. Hall and rest houses with gardens.

EQUIPMENT

AMERICAN ARCHITECT. Vol. CXLIV. No. 2624. July.
Reference data supplement No. 12. Heating, Cooling and Air Conditioning, a long technical article of value. Comparative data of various systems and calculations for design.

ARCHITECTS' JOURNAL. Vol. LXXX. No. 2065. 16 August.
Details of the Garchey refuse disposal system, used in the housing scheme at Drancy.

MATERIALS AND CONSTRUCTION

BUILDING TIMES. Vol. LIV. No. 9. August.

ARCHITECT AND BUILDING NEWS. Vol. CXXXIX. No. 3425.
10 August.

The Craft of the Slater; the first of a series of articles by Edwin Gunn [A.].

ARCHITECTS' JOURNAL. Vol. LXXX. No. 2065. 16 August.
A short informative article on Flint building and walling in Norfolk as supplement to illustration of a small cottage at Salthouse, by H. H. Goodall [L.].

MODERNE BAUFORMEN. Vol. XXXIII. No. 8. August.

Brick building. A good article which should be compared with the R.I.B.A. JOURNAL article last July 7; good details of walls and bonds, etc.

PROFIL (VIENNA). Vol. II. No. 7. July.

A well illustrated article on timber building (small dwelling houses). Modern form and planning based on traditional methods of construction in a traditional and national material.

ARCHITECTURAL RECORD. Vol. LXVII. No. 2. August.

An interesting analysis conducted by a special committee of the Home Insurance Building, Chicago, now being demolished. The Home building is 47 years old and reputed to be the first steel skeletonized skyscraper.

REPAIR OF ANCIENT BUILDINGS

ARCHITECTURE (PARIS). Vol. XLVII. No. 8. 15 August.

Practically the whole of this number is given to a very good survey of the work of the Commission des Monuments Historiques and of the Société française d'Archéologie, which are celebrating their centenary. Articles on the work of the commission and descriptions of the restoration of innumerable monuments, notably those in the battlefields which frequently required not only reparation, but complete rebuilding.

TOWN PLANNING

BUILDER. Vol. CXLVII. No. 4777. 24 August.

Perspective view and layout of suggestion for the replanning of Tower Hill. (Alec Smithers [F.]).

BAUMEISTER. Vol. XXXII. No. 8. August.

An article on the planning of old country towns, illustrating by excellent aerial photographs and numbers of little known towns such as Schönenhausen, Bavaria; Lügde, Westphalia; Bräun, Southern France; Wasserburg am Inn; Braunau am Inn, etc. The article, and particularly for its photographs, is a really valuable (and delightful) reference on urban planning.

BIOGRAPHY

ARCHITECTURE (PARIS). Vol. XLVII. No. 8. 15 August.

The Tercentenary of the birth of Vauban, celebrated by an article on him and his architecture, by R. Davies. Vauban was the greatest of French military engineers, who designed the fortifications—works of architecture in those days—of Strasbourg, Metz, Phalsbourg and other places on the Rhine frontier, and gateways at Lille, La Rochelle, Maubeuge and elsewhere and the magnificent aqueduct at Maintenon, which is now a ruin.

BOUWKUNDIG WEEKBLAD. 1934. No. 33. 18 August.

A special obituary number on Dr. H. P. Berlage.

CASA BELLA. Vol. XI. No. 79. July.

Clemens Holzmeister, a special article on his work illustrated by photographs of his chief buildings.

Correspondence

VERMIN IN BUILDINGS

87 Buckingham Palace Road,
London, S.W.1,
20 August 1934.

To the Editor, JOURNAL R.I.B.A.—

SIR.—The context to the illustration Fig. 1, page 881, means and reads as printed, ". . . picture rail . . . which cannot be easily cleaned out": a correct description. Picture rails are more often than not in the modern low rooms put so high that they cannot be inspected. At any height they are not, and cannot be, in practice kept clean. Imagine a harassed housewife examining and cleaning daily about 200 feet run of picture rail, necessitating about 50 or 60 moves of a step ladder or chair!

Picture rails are an abomination which should be as illegal as a D trap. They are the natural habitat and forcing bed for bugs, and any architect who specifies them for working-class dwellings ought to be made to provide 12 months' service in keeping them clean.

A long experience of slum dwellings leads me to believe that picture rails constitute the most insanitary feature in modern construction.

I am, Sir,
Yours truly,

PERCIVAL M. FRASER [F.]

"POLSLOE PRIORY, EXETER, AN EARLY SCARFED JOINT"

7 Bedford Circus,
Exeter.

17 August 1934.

To the Editor, JOURNAL R.I.B.A.

SIR.—In your issue of the 21 July 1934, on page 917, reference is made to the above and the writer speaks of Fig. 2 (b) as a "a later and more perfect form."

I am of opinion that the earlier craftsmen knew exactly what he wanted and adopted the correct method to obtain it in Fig. (a).

The older method retains the wedge effect; the greater the weight the more tightly the joint is driven together. The shoulders shown in (b) entirely prevent this action and a large portion of the weight being thrown upon these small portions, of the outside of the post, these shoulders are liable to split off.

In the earlier work the joint is mechanically bound together in every direction by the load and this weight is driven directly into the centre of the post to the heart of the timber. It is not carried at all on the outside, viz., the weakest part of the wood.

—Yours faithfully,

RICHARD M. CHALLICE.

Obituary

DR. HENDRIK PETRUS BERLAGE. ROYAL GOLD MEDALLIST, 1932. HON. CORR. MEMBER.

With very great regret we record the death of Dr. H. P. Berlage which took place in his seventy-eighth year early on Sunday 12 August. The universal acclamation of Dr. Berlage as the doyen of modern architects and as the leader of the profession in his own country, Holland, was recognised two years ago by the Royal Institute, when it recommended his name to His Majesty the King as a fit recipient of the Royal Gold Medal, which was presented to him on 7 March 1932. This award was notable as the first occasion on which the medal had been awarded to a definite modernist. Many members of the Institute will remember with pleasure the visit which Dr. Berlage then paid to England and the tribute which Sir Raymond Unwin, as President, paid to him. "We have met to-night," said Sir Raymond, "to honour a distinguished colleague . . . a man whose life work is recognised by architects throughout Europe as one of the chief formative influences in the revival of architecture and its adaption to meet fresh needs and conditions. . . Dr. Berlage had the courage to break away from a decayed and corrupted tradition, and to attempt the great task of recapturing older traditional principles of directness, sincerity and fitness for purpose. . . Now, largely as the result of his courageous efforts, backed by an outstanding ability and integrity of character and a personality so truly lovable as to overcome all opposition, he has the satisfaction of knowing that his country stands high among the nations for the quality of its architecture and town-planning."

To-day, when the great ideals of architecture for which Berlage worked have so widely become the guiding principles of architecture everywhere and have found legitimate and brilliant application in a great variety of ways, it is difficult to realise how unique was his effort when it was first made. There were, and indeed there yet remain with us, some of his contemporaries in this and other countries who thought and worked as he did, but it was Berlage's own outstanding practical ability and, as Sir Raymond pointed out, his compelling personality which led him to the position of pre-eminence which gave him opportunities for the exercise of his art denied to others. Our own Philip Webb, for instance, was one who, even before Berlage, had turned from "a decayed and corrupted tradition." The historian of modern architecture can find many similarities in the approach made by these two great architects to their problems, and similarities in the form and character of their works. Berlage had the particular fortune to live to the time when social conditions gave opportunities to him to free his work from the characteristics reminiscent of the 'nineties, when he first started practice. Even more important, opportunities were given to his pupils to carry his teaching yet further.

As one of his obituary biographers has suggested, no estimate of Berlage can leave out the work of his pupils; though he never became, as have so many architects from Vitruvius to Serlio to le Corbusier, a person who taught by the written or spoken word, his influence was

widespread because his executed buildings stood, and stand, as a more dramatic lesson than any amount of literary theorising, they were accepted as such not only in his own country but throughout the younger generation who were ready and able to learn.

In his first years Berlage practised in the accepted contemporary style of his country and built a number of private houses based directly on existing forms, among these can be named a house in Baerlestraat, Amsterdam, built in 1892, and a house at Groningen in 1894; but before the end of the decade his individuality developed so surely and rapidly that the Amsterdam Bourse, which he built as the result of a competition in 1897, still can be accepted as his greatest building. This building, which is now accepted as typical of Dutch character, when it was first built caused such an outburst of opposition, as always greets a work in advance of its time. Among his more recent buildings can be named the headquarters of the Diamond Workers' Trade Union, the New Exchange, and most recently the Christian Science Church, all in Amsterdam, and the new National Museum at the Hague. As a tribute to his position the Municipality of Amsterdam gave him, on his seventieth birthday, the work of designing a bridge, which was named after him, in one of the newer quarters of the city.

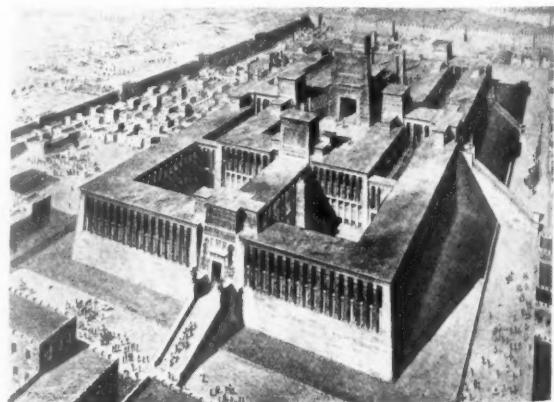
In London there is one striking building, the office and warehouse of a shipping company in Bury Street, E.C., designed in 1917, which should be more widely recognised than it is as an important, if restrained and obscurely placed, contribution to London architecture. Had Berlage been a painter there would assuredly have been a treasured group of his works beside the Van Goghs in the Tate Gallery; architecture does not allow such definite collecting of examples, and each town must wait for the fortune of a citizen able to recognise and patronise architectural genius in a practical way before it can have an example of any particular architect's work to add to its fame. We can account ourselves fortunate in having Dr. Berlage so represented in our streets.

By the death of Dr. Berlage we have lost one of the few remaining pioneers of modern architecture, a man who in any age or country would have stood out among his contemporaries, but who perhaps only in his own country, Holland, could have found such opportunities to develop his art and to become the accredited leader of a whole generation.

CHARLES STANLEY PEACH [F.]

By the death of Charles Stanley Peach on 20 July 1934 the R.I.B.A. has lost a loyal member and a wise councillor. During the years when he was actively engaged on the Council and various Standing and other Committees his advice was often asked and almost always followed. His quiet clear voice, his sense of humour, and his wide knowledge of humanity helped to make him an ideal arbiter in difficulties. For an architect he had an unusual apprenticeship. Trained to be a doctor, spending several years as a surveyor in the Eastern Rockies, it

was not till he was 24 that he entered the office of an architect. This varied training in his early years had naturally a broadening effect on his whole outlook on life and on the activities of his well-ordered brain. A pioneer in things electrical he built many power stations; but the present generation will remember him best for his design of the All-England Lawn Tennis Club at Wimbledon, and for his untiring labours on the Works Committee of St. Paul's Cathedral, to which he was appointed by the R.I.B.A. in 1925. Many will remember the experimental model of the Dome of St. Paul's, made at the age of 70 with his own hands, and which could be stressed to illustrate the actual stresses of the dome itself. Like William Dunn before him on that Committee he had a mathematical mind which delighted in problems of this nature. As might be expected he had a wide circle of friends amongst whom he numbered many clients. During the failing years of his life when asthma and heart trouble would have caused many men to give up, his indomitable pluck and humour never deserted him. He felt that his work was not quite finished and that by holding on he might still be of service to those who mattered to him. Gradually, however, his burdens in the office were shifted more and more—without his knowledge—on to the shoulders of his partners, Mr. G. W. Knight and his son-in-law, Major Harington, so that he had the satisfaction of dying in harness, which to a man of his character must have been a source of gratification. He was always a tireless worker and, after a strenuous day's labours, would often work right through the night upon drawings of an imaginative character, such as that of "The Christian Church" or on his scale drawings of the Temple of Solomon, or the stress model of the Dome of St. Paul's. Those of us who drilled under him in the early days of the war could not fail to be struck with his energy and resourcefulness, which he must have learnt in his early days in the open prairies.



MR. STANLEY PEACH'S DRAWING SHOWING A RECONSTRUCTION OF SOLOMON'S TEMPLE AT JERUSALEM

Charles Stanley Peach was born at sea, on the return journey from India in 1858. Educated at Marlborough, he intended to follow a medical career, but before taking his final examination he found the profession distasteful. He had some influential friends in the United States and applied for an appointment in the Government Survey. He was sent as an assistant with a party of surveyors to the eastern part of the Rockies, in connection with the proposed trans-continental railway to the Pacific. This was in the late 70's when the country was still wild and uncultivated and inhabited only by encampments of Red Indians, where now are large and prosperous cities. He had countless adventures and many narrow escapes, some of which were illustrated by his own sketches published in the *Graphic* in 1879. Owing to a serious riding accident he was invalided home, and being obliged to lead a sedentary life decided to make use of his experience of surveying and take up architecture. In 1882 he entered the office of Mr. Hugh Rounie Gough, F.R.I.B.A., with whom he worked till 1884, when he set up practice for himself in Carlton Chambers, Regent Street, moving to Warwick Square, S.W., in 1921. During the 50 years of his practice his activities covered a wide and varied field—churches, houses, blocks of flats, theatres, restaurants, bridges, homes for the Church of England Waifs and Strays Society, business premises, factories, cold storage houses, and the lay-outs of several large estates.

From its very earliest days he realised the immense possibilities of electricity; and shortly after the passing of the original Act of Parliament permitting the supply of electricity to the public, he, with one or two kindred spirits, formed a small company at Westminster; and having installed one or two small dynamos in a building near St. James's Park they commenced to supply current for lighting to premises in the neighbourhood. From this beginning he got into touch with larger companies which had provisional orders; and as time went on he became the architect to many of the leading electricity companies in London and to a number of provincial corporations. In numerous cases he remained the architect to these companies until his death.

In 1904 he read a paper before the R.I.B.A. on "Central Stations, from the Architects' Point of View." In order to obtain data for this subject he visited electric stations in other countries, including Antwerp, Munich, Berlin, Vienna, Paris, Copenhagen, Amsterdam, and elsewhere, and also received considerable information from the architects of all the leading stations in the United States.

In 1892 he became a Fellow of the Royal Institute of British Architects, and for many years was a member of the council of that body and of the Science, Practice and other Committees of the Institute.

Amongst his many activities Peach had during a number of years made a close study of the construction of Solomon's Temple at Jerusalem. In 1914 he made a trip to the site where he carried out a number of surveys, prepared drawings and made copious notes from the foundations and fragments of the original building which still existed. It had been his wish to edit the notes and drawings and finally to publish a work on this subject which had been a hobby of his during so many years, but owing to his poor health and to his large practice he was prevented from attaining his wish. A magnificent drawing of the Temple, made by his own hands, which is one day to become the property of the R.I.B.A., is illustrated in this number.

At the outbreak of war Peach gave valuable assistance in the raising of the Volunteer Training Corps of the Architectural Association and was appointed its Commandant. He also assisted in recruiting large numbers of men for War Service and for the Labour Battalions. He was later appointed Captain in the Artists' Rifles and did valuable work throughout the remainder of the war as instructor in field engineering. He was in France for a short time and was awarded the Victory Medal.

Since the war his most important works have been the construction of the new stand for the All-England Lawn Tennis Club at Wimbledon, and many more factories and offices, including a large printing-ink factory in Clerkenwell Road, and various offices and other works for electricity companies. In 1925 he was appointed by the R.I.B.A. as their representative on the Works Committee of St. Paul's Cathedral; and though at that time his health was failing he was tireless in his investigations of problems connected with the safety of the building; and the work carried out, entirely at his own expense, was of the very greatest interest and value in the restoration of the Cathedral.

At the time of his death he still had an extensive practice including the construction of a large block of flats in Fulham Road and, in collaboration with Mr. Stanley Hall, the extension of the Infants' Hospital in Vincent Square. He kept his interest in his work to the end, though naturally much of it devolved on Mr. G. W. Knight and his son-in-law, Major A. J. Harington, both of whom he had taken into partnership within the last few years. Illustrations of two of his recent buildings were exhibited in this year's Academy. His practice will be continued under the name of Stanley Peach and Partners.

Peach married in 1889, and had one son, who was killed in the war, and two daughters.

E. STANLEY HALL [F.]

In the short notice of Mr. Stanley Peach which was published in the last number of the JOURNAL it was incorrectly stated that he had built over forty houses for the Church of England Waifs & Strays Society. He actually built two houses for the Society, one at Princes Risborough and one, St. Saviour's, at Harrow.

RAYMOND HOOD

Mr. George Drysdale [F.] has contributed the following memoir of the late Raymond Hood:—

I should like to write a word of appreciation of Raymond Hood, who died recently. Meeting him first in the Atelier Duquesne in 1908 I had counted him among my best friends ever since. Hood was moderately successful at the Beaux Arts; he fully enjoyed the life, and was immensely popular with the Frenchmen. Returning to America in 1911, he had a great struggle and little work for ten years or more. About the time of the Chicago Tribune Competition his family had had about enough, and wanted him to give up architecture for a safe job as a clerk in an office. A friend who had already advanced him considerable sums to enable him to continue in practice was approached. His advice to Hood was to carry on as he, the friend, was sure of his capacity

for architecture, but doubtful of his use at anything else, and that he was still good for another 2,000 dollars or so. Hood started on the Chicago Tribune competition, and worked himself to a standstill, so much so that another friend had to finish the drawings for him.

As the world knows, Hood won, and established himself. This success was followed quickly by many others, and in a very short time the little man became one of America's leading architects. I know as yet no details of his end, but this success with the strain and the stress of it leaves little room for doubt as to the reason.

Full of ideas, extremely modern in point of view, and very keen, Hood was a fascinating, original and very delightful companion. He held the life of a modern building to be a matter of twenty-five years; he himself will at least be glad that he has not outlasted his usefulness.

JOHN GEORGE BURRELL [L.]

Mr. J. G. Burrell was born in 1863 and died in April 1934. He received his training as an architect and surveyor in the office of Alderman J. Dunn, of Newcastle-on-Tyne, subsequently entering into partnership in Newcastle with the late Mr. A. B. Pincher [F.], in collaboration with whom he undertook numerous church repairs. In 1900 he went to Durham and practised there independently till 1930, his offices being at Market Place Chambers. Amongst the architectural and planning work for which Mr. Burrell was responsible were the County Schools at Wrexham, in collaboration with Mr. F. Whalley, housing schemes for the Durham city and urban Councils, various branches of Lloyds Bank and schools, and, in conjunction with Messrs. Morton (South Shields), housing schemes at Crook and Blythe, and the Prudhoe Hall Colony for the Mentally Deficient. He did a great deal of work as a surveyor in connection with colliery damages, etc., was a valuer for the Globe Permanent Building Society and frequently acted as arbitrator. He was a member of the Northern Architectural Association, a Freeman of Newcastle and a member of the Rope Makers' Guild. He was an enthusiastic athlete, at one time captain and later President of the Durham City Amateur Rowing Club, and for six years played Rugger for Durham City Club.

Notes

R.I.B.A. CENTENARY CELEBRATION

The Centenary Celebration Conference will begin on Wednesday, 21 November, and will continue until Saturday, 24 November.

The following programme has been arranged provisionally:—

Wednesday, 21 November:

9 p.m. to 12 p.m. Reception in the new R.I.B.A. Building.

Thursday, 22 November:

11 a.m. to 12.30 p.m. Inaugural Meeting. Address by the President. Reception of Delegates.

2.30 p.m. to 6 p.m. Visits to Buildings and other places of interest in London.

7.15 for 7.45 p.m. Centenary Celebration Banquet.

Friday, 23 November:

10 a.m. to 1 p.m. Lectures and discussions in the new R.I.B.A. building.

2.30 p.m. to 6.30 p.m. Visits to Buildings and other places of interest in London.

9 p.m. to 2 a.m. Dance in new R.I.B.A. building.

Saturday, 24 November:

9.30 a.m. to 1 p.m. Visits to places of interest in London.

It is hoped that all members who are in a position to do so will reserve these dates and endeavour to take part in the Conference.

R.I.B.A. NEW BUILDING FUND

CONTRIBUTIONS RECEIVED OR PROMISED

	£	s.	d.
Brought forward	11,553	17	2
Professor Bernard Ashmole [Hon. A.]	2	2	0
Mr. Ernest Bates [F.]	10	10	0
Mr. John Bennett [F.]	3	3	0

	£	s.	d.
The Birmingham and Five Counties Architectural Association	50	0	0
Mr. John Borrowman [A.]	1	1	0
Mr. C. W. Brown [A.]	1	0	0
Mr. Charles D. Carus-Wilson [F.]	5	5	0
Mr. E. Stone Collins [F.]	5	5	0
Messrs. Cowin, Powers and Ellis (N. T. Cowin [L.], Ernest M. Powers [F.], and T. G. Ellis [A.])	5	5	0
Mr. H. Alderman Dickman [F.]	3	3	0
Mr. H. L. Goddard [F.]	5	5	0
Messrs. Hobbs, Forbes and Partners (Sir J. Talbot Hobbs [F.], W. J. Waldie Forbes [F.], Athol J. Hobbs [A.], Howard T. Forbes [A.] and A. B. Winning [L.])	5	5	0
Mr. William P. Horsburgh [F.]	2	2	0
Mr. Ivor L. James [L.]	1	1	0
Mr. Gilbert H. Lovegrove [F.]	2	0	0
The Natal Provincial Institute of Architects	10	10	0
Mr. A. E. Powles [F.]	5	5	0
Mr. Robert R. Prentice [F.]	2	2	0
Mr. Peter Warren [L.]	5	5	0
Messrs. P. J. Westwood and Sons (P. J. Westwood [F.] and Bryan Westwood [A.])	5	5	0
Mr. G. W. Winter [L.]	1	1	0
Mr. A. B. Yeates [F.]	5	0	0

Total received or promised to 28 August 1934 £11,690 12s. 2d.

In addition, the Council of the Royal Institute of the Architects of Western Australia have promised to contribute the rebates received from the R.I.B.A. for the years 1934, 1935 and 1936.

"PAINTINGS FOR A WHITE ROOM," BY MIRIAM WORNUM

An Exhibition of decorative still-life paintings, specially designed to give colour to the modern room, will be held at the Cooling Galleries, 92 New Bond Street, W.1, for a fortnight, beginning Thursday, 4 October, and closing 17 October.

The vogue for dead white rooms furnished in off-white or very light colours is one that definitely needs some form of decoration either to emphasise its clarity or to give that contrast which will bring out its full beauty.

These paintings have been designed on these lines both in composition, colour and framing to supplement the work of the architect and decorator.

EXHIBITION OF ECCLESIASTICAL ART

Under the auspices of the East Kent Art Society an Exhibition of Ecclesiastical Art is to be held in Canterbury next Easter, its chief aim being to encourage good craftsmanship in all things connected with ecclesiastical art. The Exhibition will be held in the Canterbury School of Arts and Crafts and the actual date will be published within the next few weeks. Among the patrons of the Exhibition are Sir Giles Gilbert Scott, Mr. Guy Dawber and Mr. Eric Gill.

The committee is sending out an appeal to obtain the loan of such notable examples of the work of past centuries as will clearly set forth the standard of ancient tradition, and a special effort is also being made to collect the best examples of the work of living craftsmen.

Further particulars will be published in due course and may be had from the Hon. Secretary of the Society, Mr. A. Moody, M.R.C.A., School of Art, Margate.

THE ENGINEERING SOCIETY OF JAPAN

The death is announced of Baron Furuchi, for many years President of Nihon Kogakkai, the Engineering Society of Japan. In 1929 Baron Furuchi presided over the World Engineering Congress. Baron Shiba has been elected President of Nihon Kogakkai in his place.

CORRECTION

In the last JOURNAL it was incorrectly stated that Mr. Dykes-Bower's paper on Organs and Organ Cases was read before the St. Paul's Ecclesiastical Society. The proper title of this Society is, of course, the St. Paul's Ecclesiastical Society. The chairman at this particular meeting was Sir William Alcock.

NOTES FROM THE MINUTES OF THE COUNCIL
2 July 1934

PRIZES AND STUDENTSHIPS: GENERAL CONDITIONS

On the recommendation of the Board of Architectural Education, General Condition No. 6 was amended to read as follows:—

"Except where otherwise stated, no competitor for any prize or studentship shall be eligible to receive for a second time a prize or studentship or medal which he may previously have gained. This condition does not, however, apply to competitors placed second in competitions nor to competitors awarded Certificates of Honourable Mention."

PROGRAMMES OF STUDY PROPOSED BY R.I.B.A. PRIZE WINNERS

The Board reported that they had approved the programmes of study proposed by the following prize winners:—

(1) Miss Sadie Speight, R.I.B.A. Neale Bursar 1934.

- (2) Mr. W. A. Eden, R.I.B.A. Hunt Bursar 1934.
- (3) Mr. A. D. Kirby, R.I.B.A. Tite Prizeman 1934.
- (4) Mr. G. D. Griffiths, R.I.B.A. Alfred Bossom Travelling Student 1934. (The Committee of Officers of the Board of Architectural Education have given Mr. Griffiths permission to reduce the time to be spent in America from six months to four months, excluding the time to be spent in travel.)

THE R.I.B.A. HENRY JARVIS STUDENTSHIP AT THE ARCHITECTURAL ASSOCIATION SCHOOL OF ARCHITECTURE, 1931

The Board reported that the students and thesis on Cement and Concrete submitted by Mr. W. W. Fisk in connection with the Studentship had been approved.

THE ROME SCHOLARSHIP IN ARCHITECTURE

It was formally reported to the Council that the Faculty of Architecture of the British School at Rome had awarded the Rome Scholarship in Architecture for 1934 to Mr. F. A. C. Maund (1), of the Armstrong College School of Architecture (Durham University), Newcastle-on-Tyne.

STUDENTS OF THE R.I.B.A. OVERSEAS

In view of the fact that Students R.I.B.A. overseas do not pay the usual Students' contribution of £1 1s., but receive the JOURNAL and Calendar free of charge, it was resolved, on the recommendation of the Board, that in the case of Students of the R.I.B.A. resident overseas a time limit of five years from the date of the election of the Student be imposed for remaining on the Register of Students.

ADVISORY PANELS

The report of the Panels Sub-Committee of the Central Panels Committee on "How to make the Panel System work well" was approved.

The Council also approved a memorandum submitted by the Public Relations Committee regarding a suggested Code of Procedure for adoption by the architect-members of the Advisory Panels.

EXHIBITION OF WORK BY THE ARCHITECTS' UNEMPLOYMENT COMMITTEE

A cordial vote of thanks was passed in favour of Lord Snell for his kindness in opening the Exhibition of Work by the Architects' Unemployment Committee.

MEMBERSHIP

The following members were elected:—

As Fellows	6
As Associates	17

R.I.B.A. PROBATIONERS

During the month of July, 1934, the following were registered as Probationers of the Royal Institute:—

BLOW: RICHARD PURCELL, 3, Carlos Place, W.1.
COATES: ELIZABETH ETHEL, Les Caches, S. Martins, Guernsey.
COCHRANE: FRANCIS ALFRED ARTHUR, 79, Lindon Gardens, W.2.
CROMPTON: RICHARD HARPER, "Silver Hill," Stockport Road, Hyde, Cheshire.
DEAS: JOHN HENDERSON, 40, Wingate Saul Road, Lancaster.
EGGLESTON: ROBERT ALEC, c/o, Australia House, Strand, W.C.2.
EVANS: JESSIE MAUD MORTON, 117, Ashley Road, Bristol.
FIRSHMAN: HARRY, 480, Bethnal Green Road, E.2.
FORD: GEOFFREY, 43, Coniston Road, Earlsdon, Coventry.
FURLEY: GEOFFREY HAYWOOD, 58, High Street, Stroud, Glos.
GOODALL: ERNEST ROY, 28, Blakes Lane, New Malden, Surrey.
HARSE: MORRIS EDWIN, 75, High Street, Staple Hill, Bristol.
HARTLEY: PAUL HEY, 28, Hey Road, Prestwich, Manchester.
HAWORTH: KENNETH HARGREAVES, 59A, Longsight Road, Holcombe Brook, Nr. Bury, Lancs.

HORSBURGH: IAN HEPBURN, Lyde Lodge, Exmouth, Devon.
 INESON: GEORGE HUDSWELL, 2, Portland Street, Commercial Road, E.1.
 IRONS: THOMAS ALBERT, 4, Ash Cottages, Swannington, Nr. Leicester.
 JONES: KENNETH ALBAN, Linton, Collingham, Nr. Leeds.
 KIRBY: FRANK EDWARD, 44, Mornington Road, Regent's Park, N.W.1.
 KNOWLES: RONALD WILSHIRE, 96, St. George's Road, Wallasey, Cheshire.
 McCULLOCH: ALAN JAMES GODFREY, "Berwyn," 1, Southwood Road, Liverpool, 17.
 MILES: JOHN VERNON MAVERS, Oak View, Manor Road, Chigwell.
 MIMMACK: MAXWELL ALFRED, "Gatling," Park Avenue, Skegness, Lincolnshire.
 MOTTRAM: JAMES ALLAN HUGH, "Maryville," Gullane, East Lothian.
 NANDWANA: LAKHAI KALABHAI, 90-94, Bapu Khote Street, Bombay, 9, India.
 OVERBURY: THOMAS, Doric House, St. Marks, Cheltenham.
 RHODES: GEORGE GODFREY, "The Glen," 66, Chadwick Road, Westcliff-on-Sea, Essex.

RHODES: JOHN PERCY, "The Glen," 66, Chadwick Road, Westcliff-on-Sea, Essex.
 RILEY: CHARLES FREDERICK, "Colby House," Polefield Road, Blackley, Manchester.
 ROWNTREE: ANN, "Jarrets," Fulmer Road, Gerrards Cross, Bucks.
 SAUNDERS: JOHN HENRY, 26, Thornbury Avenue, Southampton.
 SPARROW: AILEEN HOPE JOHNSTON, Clonastin, Ollerton, Knutsford.
 THOMAS: DEWI PRYS, 23, Ducie Street, Liverpool, 8.
 TOMALIN: ROGER RIDLEY, Hazelglen, Sanderstead, Surrey.
 UNWIN: DOUGLAS ALBERT, 113, Broxholm Road, West Norwood, S.E.27.
 VAZ: JULIUS LAZARUS, Moghul House, De Lisle Road, Bombay, 13.
 WILLCOX: JOHN THOMAS, "Oak Lodge," Hull Road, Cottingham, East Yorks.
 WILSON: IAN BURNS, "Sentosa," Hawthorn Road, Wallington, Surrey.
 WILSON: STEPHEN, School House, Grindale, Bridlington.

Notices

THE BUILDING EXHIBITION, OLYMPIA, 1934
 It has been customary for many years past for the Secretary of the Institute to send an invitation to members to attend the biennial Exhibitions at Olympia. Through the kindness of the organiser of the Exhibition, Mr. H. Greville Montgomery, *Hon. A.R.I.B.A.*, each of these invitations carries the sum of 2s. as a contribution to the Architects' Benevolent Society.

The Exhibition is open from 12 to 26 September inclusive, and it is hoped that members of the Institute will use the ticket that will be found enclosed with this issue of the *JOURNAL*.

NEW BUILDING MATERIALS AND PREPARATIONS

The Science Standing Committee wish to draw attention to the fact that information in the records of the Building Research Station, Garston, Watford, is freely available to any member of the architectural profession, and suggest that architects would be well advised, when considering the use of new materials and preparations of which they have had no previous experience, to apply to the Director for any information he can impart regarding their properties and application.

THE NATIONAL ASSOCIATION OF WATER USERS

Members are reminded that the National Association of Water Users, on which the R.I.B.A. is represented, exists for the purpose of protecting the interests of consumers.

Members who experience difficulties with water companies, etc., in connection with fittings are recommended to seek the advice of the Association. The address of the Association is 46 Cannon Street, London, E.C.4.

OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place on 3 December 1934 they should

send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 22 September 1934.

LICENTIATES AND THE FELLOWSHIP

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

THE USE OF THE TITLES "CHARTERED ARCHITECT" AND "REGISTERED ARCHITECT"

Now that the Registration Act is in force, the Council have been asked to give advice with regard to the best way to use the title "Registered Architect" by members of the R.I.B.A. who have been placed on the Register, and who already have the right to use the designation "Chartered Architect."

The Council recommend that members of the R.I.B.A. who have been registered should use the designation "Chartered and Registered Architect."

LEGAL ADVICE FOR MEMBERS OF THE R.I.B.A.

The Practice Standing Committee, with the approval and authority of the Council, have made arrangements with an experienced solicitor whereby members of the R.I.B.A. can obtain legal advice for a very moderate fee on matters which arise in their practice from time to time.

The following arrangements have been made:

A member desiring advice as to his legal position should in the first instance communicate his enquiry to the Hon. Secretary of the Practice Standing Committee, together with the relative documents. Should the matter raise a question of general interest to the profession the Committee would obtain the opinion and forward it to the member. In other cases the member would be put in communication with the solicitor, who would advise him direct.

In matters of general interest the solicitor's fee would be borne equally by the R.I.B.A. and the member concerned, and in other cases the fee would be borne wholly by the member. The fee would in either case be limited to a fixed amount. The advice would normally be confined to an opinion on the documents, but in cases where an interview between the member and the solicitor would be desirable, this would be arranged without extra fee. Particulars as to the fee chargeable may be obtained on application to the Secretary, R.I.B.A.

BUILDING SURVEYING EXAMINATIONS

The R.I.B.A. Statutory Examination qualifying for candidature as District Surveyor in London and the R.I.B.A. Examination qualifying for candidature as Building Surveyor under Local Authorities will be held at the R.I.B.A. on 10, 11 and 12 October 1934.

Applications for admission to either examination must be made not later than 19 September 1934, on the prescribed form to be obtained from the Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

COMPETITIONS

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice, in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

Competitions

NEW MILLS U.D.C. HOUSING LAY-OUT COMPETITION

Members of the Royal Institute of British Architects and of its Allied Societies must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

BISHOPSGATE: POLICE STATION

The Corporation of the City of London are proposing to hold a competition for the rebuilding of the Police Station, Police Hospital and attendant premises at Bishopsgate. The competition will be open to architects whose principal offices are in the area of the City of London or Metropolitan Police.

COVENTRY: HOSPITAL EXTENSION

The Committee of the Coventry and Warwickshire Hospital are proposing to hold a competition for extensions to the Hospital and the President has nominated Mr. S. N. Cooke [F.] to act as Assessor.

COVENTRY: NEW PUBLIC ELEMENTARY SCHOOL

The City of Coventry Local Education Authority invite

Registered Architects who on 1 August 1934 were residing or practising in the City of Coventry to submit in competition designs for a new Public Elementary School to be erected on a site at Wyken.

Assessor: Mr. A. C. Bunch [F.]

CROYDON: DEVELOPMENT SCHEME

The Corporation of Croydon are considering a proposal to hold a competition for the lay-out and development of a site in the centre of the town.

DARLINGTON: DEVELOPMENT SCHEME

The Darlington Town Council are proposing to invite a limited number of architects to submit in competition schemes for the lay-out and development of the centre of the town.

EGHAM: TOWN HALL AND COUNCIL OFFICES

The President has nominated Mr. O. P. Milne [F.], to act as Assessor in the competition for a new Town Hall and Council Offices for the Egham Urban District Council.

ENFIELD: CIVIC BUILDINGS

The President has nominated Mr. Maurice E. Webb, D.S.O., M.C. [F.], to act as Assessor in the competition to be promoted by the Enfield Urban District Council for new civic buildings.

EXETER: CITY HALL

The Exeter City Council are proposing that a new City Hall be erected on the Higher Market site, and that designs be invited in open competition.

GOSPORT: NEW TOWN HALL

The Corporation of Gosport are to hold a competition for a new Town Hall, and the President R.I.B.A. has nominated Mr. A. B. Knapp-Fisher [F.] to act as Assessor.

HERTFORDSHIRE: NEW COUNTY OFFICES

The Hertfordshire County Council are proposing to hold a competition for new County Offices to be erected on the Leahoe estate site. Premiums of £350, £250 and £150 are to be offered.

HASTINGS: NEW GRAMMAR SCHOOL

The Corporation of Hastings are proposing to hold an open competition for a new Grammar School, and Mr. C. Cowles-Voysey [F.] has been appointed to act as Assessor.

ROMFORD: NEW MUNICIPAL BUILDINGS, ETC.

The President has nominated Mr. Kenneth M. B. Cross [F.] to act as Assessor in the competition to be promoted by the Romford Urban District Council for new Municipal Buildings and Assembly Hall.

SWINDON: PROPOSED TOWN HALL EXTENSION

The Town Council of Swindon propose to hold a competition for Extensions to the present Town Hall, and Mr. A. B. Knapp-Fisher [F.] has been appointed by the President of the R.I.B.A. to act as Assessor. Conditions have not yet been drawn up.

TUNBRIDGE WELLS: NEW CIVIC CENTRE

The Corporation of the Borough of Royal Tunbridge Wells invite architects to submit in open competition designs for a new Civic Centre to be erected on a site in Calverley Parade. The units comprising the scheme are as follows:—

- (a) Council suite and Municipal Offices.
- (b) Assembly Hall.

- (c) Police Station and Police Court.
- (d) Fire Brigade Station.
- (e) Public Library and Municipal Museum.

Assessor: Mr. E. Berry Webber [A].
 Premiums: £300, £200, £100 and £75.
 Last day for questions: 6 July 1934.
 Last day for receiving designs: 22 September 1934.

WEMBLEY: NEW MUNICIPAL OFFICES

The President has nominated Mr. Stanley Hamp [F.] to act as Assessor in the competition for new Municipal Offices for the Wembley Urban District Council.

WOLVERHAMPTON: MUNICIPAL ASSEMBLY HALLS

The Corporation of Wolverhampton invite architects of British nationality, resident in the British Isles, to submit in competition designs for new Municipal Assembly Halls.

Assessor: Mr. C. Cowles-Voysey [F].
 Premiums: £350, £250 and £150.
 Last day for questions: 21 May 1934.
 Last day for receiving designs: 1 October 1934.

YORK: LAY-OUT SCHEME

The City Corporation of York propose to invite architects to submit in competition designs for the lay out of a site on which municipal buildings will probably be erected.

COMPETITION RESULTS

CHURCH AT EARLHAM, NORWICH

1. Mr. J. Harold Gibbons [F.]

BELFAST: SANATORIUM EXTENSIONS

1. Messrs. Gibson and MacGeagh [F. and A.] (Belfast).
 2. Mr. E. G. Samways (Belfast).
 3. Messrs. Blackwood and Jury (Belfast).

Members' Column

PARTNERSHIP WANTED

FELLOW with wide experience desires partnership, or position with view to partnership, in firm of repute. Capital available.—Box No. 1484, c/o Secretary R.I.B.A.

ASSOCIATE, returned from Far East, desires to purchase partnership in South or South-East England. Box No. 1384, c/o Secretary R.I.B.A.

NEW OFFICE

MR. A. GEOFFREY BAZELEY, M.A., A.R.I.B.A., has opened an office at Greenmarket Chambers, Penzance. (Telephone: Penzance 592).

NEW PRACTICE

MR. C. J. PARKER [A.] has commenced practice at 4a Bloomsbury Square, London, W.C.1.

CHANGE OF ADDRESS

HORACE CUBITT, F.S.I. [A.], District Surveyor for City of London East, has changed his address to 26 Martin Lane, Cannon Street, E.C.4. Tel.: Mansion House 9976.

H. E. FLINN [L.] has changed his address to Britannia Buildings, 46 Fenwick Street, Liverpool, 2. Tel.: Liverpool Bank 4230.

MR. GEO. C. LANE [Student], has commenced practice at "Cromer House," 194 Parrock Street, Gravesend, and will be glad to receive trade catalogues, etc.

MR. G. M. KINGSFORD, M.A., [A.], has changed his address to 115 Moorgate, E.C.2. (Telephone: Metropolitan 4863).

Messrs. Leete & Darby have changed their address to 1, The Centre, Weston-super-Mare. (Weston-super-Mare 695.) In future the Practice will be carried on under the name of the Sole Partners: Nicholas H. N. Darby [A.], P.A.S.I., A.M.T.P.I.

COLIN S. DAY [A.] has changed his address to 13, Tentley Park, Welwyn Garden City, Herts, where he is opening an office.

Architects' Benevolent Society

PENSION AND FAMILY PROVISION SCHEME FOR ARCHITECTS

The provision of an adequate pension when working days are over has been a matter of grave concern to the professional man since interest rates on gilt-edged and other safe stocks have fallen with no immediate prospect of recovery. There was a time when a few thousand pounds meant comfort, but those days have gone, and the scheme of pension and family insurance outlined below makes its appearance at a most opportune moment.

The scheme has been formulated by the Insurance Committee of the Architects' Benevolent Society and is available to all members of the R.I.B.A. and its Allied and Associated Societies. An adequate pension can be secured, fixed in amount, and in every way guaranteed, together with the benefit of a widow's pension, payable for life and similarly guaranteed, if the member does not reach retirement age.

The scheme is designed on the broadest lines and the member without dependants may take advantage of the pension benefit alone or the pension can be commuted for a cash sum if desired.

BENEFITS UNDER THE SCHEME

The benefits under the scheme include:—

(1) A Member's Pension, which may be effected for units of £50 per annum, payable monthly and commencing on attainment of the anniversary of entry nearest to age 65. This pension is guaranteed over a minimum period of five years and payable thereafter for the remainder of life.

(2) The Beneficiary's Pension, payable as from the anniversary mentioned in Benefit No. 1, but to the widow (or other nominated beneficiary) if the member dies before age 65. The amount of this pension is adjusted in accordance with the disparity between the ages of the member and his wife.

(3) Family Provision. Under this benefit a payment of £50 yearly is made to the dependant from the date of death of the member prior to age 65 until attainment of the anniversary previously mentioned, after which Benefit No. 2 becomes available.

Provision can be made for any number of units (of £50 per annum) up to a maximum of £500 per annum.

By adopting a scheme which is limited to members of the architectural profession, the Committee has been able to secure more advantageous terms than would be obtainable by members individually.

Members are entitled to claim rebate of Income Tax on their periodical contributions to the scheme both in respect of pension and of family provision benefit.

Full particulars of the scheme will be sent on application to the Secretary, A.B.S. Insurance Department, 9 Conduit Street, W.1.

R.I.B.A. JOURNAL

DATES OF PUBLICATION.—1934.—8 September; 15 October.

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